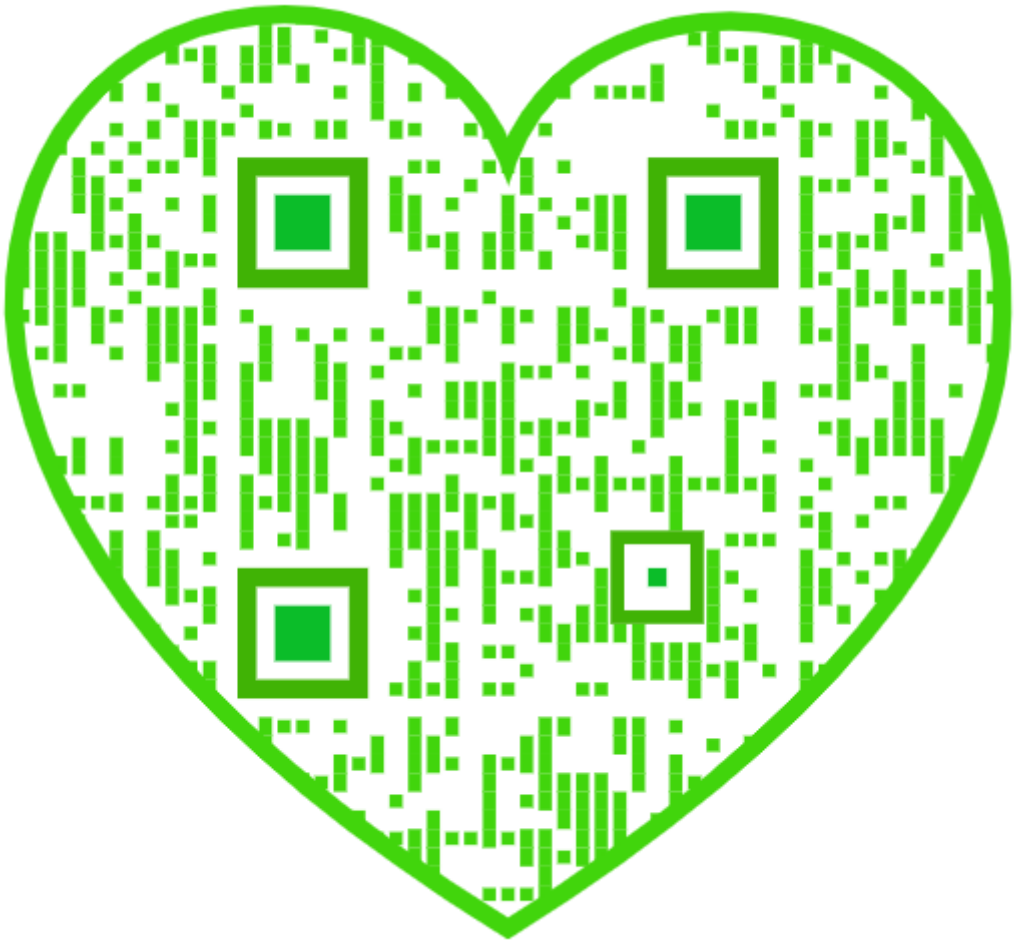

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EVOLUTIONARY PRACTICE OF MEDICINE AND SURGERY.

CAUSES AND DIAGNOSES OF CHRONIC DISEASES

ESPECIALLY OF

PROSTATE, KIDNEY, HEART,
STOMACH, LUNGS,
NEUROSES,

ETC.

BY

GEORGE WHITFIELD OVERALL, M.D.

AUTHOR OF "NON-SURGICAL TREATMENT OF DISEASES OF THE PROSTATE AND ADNEXA," ETC.

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PREFACE.

"Sound and sufficient reason falls after all, to the share of but few men, and those few men exert their influence in silence."—Goethe.

For almost one-third of a century the writer has concentrated all his energies and efforts towards determining the cause and cure of chronic diseases. While each successive year has been signalized by noteworthy improvements, yet during the last decade—and more especially during the last three years—he has made greater strides towards success than in any like period of his long, active, professional career.

Although the writer has not yet fully reached the goal towards which he has so long and so tenaciously struggled—the ideal, perfection—yet he feels that the object of his long-haunting dream has, at last, been attained; in that he has succeeded in ascertaining the causes, diagnoses and cure, of from eighty to ninety-five per cent of all those chronic diseases that have hitherto been considered incurable; and he has also discovered methods of removing the chief etiologic factors of almost all acute, infectious and contagious diseases.

It is now six years since the last edition (the third) of my work was issued from the press. Since that time there have been many noteworthy improvements and discoveries made. Of special interest are the discoveries of various causes of disease, which are of great assistance in the diagnoses, not only of the troubles traceable to the kidneys and other genito-urinary organs, but also of obscure heart, nerve, and circulatory complications,

characterized by an excess of alkali or acid in the urine which gives rise to many other organic diseases as well as rendering many vital organs inert or prematurely old by failure to eliminate the excess of such constituents, and by rendering the tissues brittle and so saturated with them as to prevent normal transudations of nutritious matter to the bodily organs, and the expelling of worn out or deleterious matter from the system. There are so many of these points which are of vital interest to the general practitioner as well as to the specialist that I hesitate to curtail free discussion concerning them, as I am almost compelled to do by limitations of space.

At an early stage of the author's professional career, while engaged in giving clinical lectures upon nervous diseases, he became convinced that the large majority of such troubles were traceable, either directly or indirectly, to lesions of organs, located, in some instances, far remote from the apparent seat of the trouble. In fact, it is rare to find lesion of the central nervous system "*a priori.*"

The greatest difficulty experienced by the author at this era, however, lay in the fact that at that time there existed no trustworthy books or precedents by which he could guide his course, and he was necessarily compelled to establish his own premises, deductions and conclusions.

While the circulation of the three former editions of my book (over 18,000 copies) has familiarized a great many of the profession with my main line of work for the past quarter of a century or more, in the treatment of prostatic, kidney and bladder troubles, and while there have been many physicians who have expressed themselves as having derived much benefit therefrom

(although they admitted they had often previously been groping in the dark), there have been others who have never procured satisfactory results. In speaking with some of these physicians, when demonstrating certain clinical points, I learned that the chief reasons for their failure arose mainly from the lack of experience in the practical uses of instruments, and lack of knowledge when to use certain remedies in acute stages of the trouble, and in sub-acute or chronic conditions. Each of these conditions requires an entirely separate and distinct mode of treatment as well as remedy for its relief. Great harm results from the injudicious advice of self-styled professors, teachers, and special mail courses on the uses of unsuitable remedies, including electricity, etc. I have been compelled to discharge two of my assistants for following some of their advice, even in my own office, and effecting harm before detection. They wanted to *cure quick*. Some of the worst cases of stricture, inflamed prostates, and even prostatic abscesses have come from treatment by the professors themselves. Almost as great a source of evil are the crude instruments that have flooded the country, which do more harm than good. In a clinical demonstration, one of the physicians present stated that he could now easily understand why he had failed to locate a special lesion, as the "landmark" was entirely different from what he had expected to find. Another could not determine, in many instances, when the instrument passed through the prostatic urethra. Others were unable to tell whether the patient had true hypertrophy or parenchymatous enlargement. The greatest difficulties encountered usually were to determine to what the condition was due, and whether it was acute, sub-acute or chronic. In fact, only a very small proportion of physicians can diagnose

these cases accurately, without having had considerable clinical experience. Many times, when points of differential diagnoses were clearly demonstrated by means of the technique of my instruments, the physicians, as they themselves expressed it, had been "at sea" before. They were unable to tell how or when to make the "curve" entering the prostatic urethra or bladder. Some would bend the instrument too soon, before reaching the place where the lesion was located; others would pass it entirely within the bladder beyond the ulcer or sore and apply the medicament to a wrong locality; while others, who curved too soon, would apply the remedies to healthy tissue within the urethral canal, before reaching the lesions. One would be surprised to learn how common such errors are among so-called "prominent" G. U. professors. There are but few physicians that ever learn to pass an instrument over the triangular ligament without using force, which gives rise to extreme pain and often more than counteracts the benefits resulting from the treatment. On the other hand, there are others who have succeeded beyond my most sanguine expectation. The most serious as well as the most frequent of all troubles arise as a result of too much treatment, and especially from the injudicious use of electricity.

There are eight special lesions, the locations, causes, and treatment of which have been definitely ascertained, and the ganglia controlling the organs subject to these lesions are also known. There is absolutely no case that may be considered free either from one of these lesions, or one of the complications that may arise therefrom. From these eight lesions not less than ninety per cent. of all chronic diseases arise, and they are also indirectly the precursors of many acute infections or contagious dis-

eases. These facts have been arrived at by numerous clinical results, and they can be demonstrated in nine-tenths of the chronic diseases with which men, women and children suffer.

The writer, having taken his medical degree at the Jefferson Medical College of Philadelphia (America's greatest Medical Institution) under Professors Gross, Pancoast, Meiggs, DaCosta, etc., the Nestors of medical instructors, he naturally expected, from such a source, a definite science; and from long-tried and highly-extolled remedies he anticipated definite results.

Full of enthusiasm, and sanguine of expectation when beginning the practice of medicine, one can little conceive of my utter despair and disappointment when I found I was unable to cure, at first, many of the most common chronic diseases with medicines.

It was then, however, that the writer was elected to the chairs of Physiology and Clinical Neuroses. One never so thoroughly masters a subject as when he attempts teaching it to others; and the exacting, arduous labor requisite to the preparing and delivering of three and often four lectures a week on the functions of organs enabled him to so differentiate between the functions of organs when in a normal condition, and when influenced by functional disturbances, pathologic lesions, or disease, that it gave him a new insight into the only real basic principles of the scientific practice of medicine.

During all these years, the writer has proceeded in his unostentatious way, demonstrating each step by *chemic, physiologic and clinical proofs;* yet at intervals contributing some of the results of his research to medical journalism. Among the first of these contributions was one to the Mississippi Valley Medical Journal, in March, 1883; in August, 1887, a second article appeared.

In April, 1896, he again contributed to the Medical Mirror; and to the Journal of the American Medical Association, January 21, 1889.

In this volume I have endeavored to deal only with cold, stubborn facts; facts not based upon theory or guess work, not upon laboratory investigation, or a few isolated clinical observations, but with facts founded upon premises, deductions and conclusions strictly in accordance with physiological laws and toxic conditions as influenced by morbific states, and proved by hundreds of authentic clincial results.

All intelligent laymen, as well as physicians, know that the most crucial epoch of the lives of both men and women is at the age of puberty, and the few years subsequent thereto; but it is not generally known that the next more serious period of the lives of both is at the menopause, or change of life. This period occurs both in men and women at, or about the age of forty to fifty. While it is generally known to physicians, that women have serious ailments about this period, yet it is not so well known that men, too, suffer with analogous troubles. It is also true that early marriage is conducive to good health and longevity. Although these facts are universally conceded, there are few (if any) of our most logical physicians that know or have ever thought of the physiologic and pathologic reasons therefor.

It doubtless seems incredible to one not having had practical experience in this line, to learn that scarcely one in five men reach manhood free from lesion or abrasion of the prostate, kidneys, heart, or other vital organs. The writer, with many others, believes that abraded surfaces are accountable for the contraction of many contagious and infectious diseases. In fact, many

believe, with him, that morbific germs can infect only through mucous membranes or an abraded surface.

One of the best and latest books on bacteriology states: "Bacteria are so minute and so ubiquitous that scarcely anything is normally free from them, and they are so hardy that it is exceedingly difficult to destroy them, without at the same time destroying the substances which it is desired to sterilize. They are not normally present in the living tissues of plants or animals, which are sealed against their entrance by skin or epithelium; but after these are cut or broken (as in a wound), bacteria speedily invade the tissues."

During the eight years that I was Professor of Physiology and Clinical Neuroses, I had occasion to treat many nervous diseases; and, while I at times gave temporary relief, relapses continued from day to day, until my patience was completely exhausted. With an abundance of clinical material, the neurotic diseases were often benefited by treatment of the central and peripheral nerves; and I labored earnestly to make symptoms, conditions, and results of treatment bend to my preconceived ideas and to the fascinating theoretical teachings in vogue at that time, and with which the books upon nervous diseases were teeming; but extensive clinical observation and practical experience would prevail; and I was finally driven, though reluctantly, to yield to the oft proven and inevitable fact, that in almost every instance (with the exception of traumatism and syphilis), nervous diseases were traceable, either directly or indirectly, to lesion of some other organ as the prime cause of such ailments in both men and women; and when these lesions were relieved the nerves usually took care of themselves, or very little treatment was required thereafter to restore them to their normal con-

dition. Not only was this made manifest in functional neuroses, but central organic lesions often supervened as a result of continuous pounding upon the cerebro-spinal centers, by reflex irritation of peripheral nerve terminals.

I was therefore compelled to change my practice, from that of specialist in nervous diseases, to that of the treatment of genito-urinary and other chronic diseases.

Not having had any experience in this line of work, up to that time, I most naturally turned to my college instructions and works on the subject as a guide. The methods in use at that time (and there has been little or no improvement since) were inadequate and unreliable. After having tried them with very unfavorable results, I turned my attention to the discovery of more rational means of treatment.

While my present methods may seem simple, many complicated and perplexing problems had to be dealt with and overcome before they reached their present state of perfection. At times I would have happy hits to be followed by utter failures.

I had been importuned for two decades by many of my patients (mostly physicians, who had been treated successfully by me), to write a book on the subject, from fear the results of my investigations and discoveries would be lost to the world. But it was many years before I felt that the clinical results warranted my incorporating them in book form—until I felt convinced that my efforts for perfection had been successful.

In writing my book, I made no effort at display, and I was determined that it should not be bulky. It required more time to condense than to write it. Its contents are based wholly upon clinical facts; and I am extremely gratified that many of my readers have been

so appreciative, as to have procured a copy of each of the three editions of my former book.

Dr. Sour, an eminent physician of Minnesota, aptly voices the sentiments of many other readers, when he wrote the following to the Medical Summary of 1908, page 24, as follows: "We have learned some very excellent things from Dr. Overall's book on the treatment of the prostate gland, and it certainly should be read by every thoughtful, up-to-date practitioner, for he will have conditions of the prostate that can only be treated in a sensible way by having a thorough knowledge of this book. Dr. Overall has worked out a system of his own that is original, practical, and gives results that no other treatment or method can. He has carved a way for himself, and we must all say he is absolutely right.

In all gonorrheal practice, cases will come up with the prostate gland involved, and the trouble with so many of us is, that we grope in the dark—treat the symptoms found at the urethra, subject it to all sorts of malpractice and never for once think or try to find out the cause of the whole trouble. We simply go about it in a blind way. We were not so much to blame, however, because we had no real up-to-date book on this subject, and operating on the gland was not satisfactory. But since Dr. Overall has drawn the curtain aside and shown us facts that he proves every day, we have no excuse, for we can now know ourselves how to relieve these cases."

For many years the writer has been so busy studying the laws of Nature, and the normal or physiologic states, as well as the pathologic conditions brought about by different lesions and conditions of the surrounding media, that he has not had time to study the various theories advanced, and the chemic and laboratory researches of

others, as he would have liked to have done. He has only glanced at them from time to time, noting the various theoretic deductions, and has been surprised at the channels followed for so many years without results. It is strange that the medical profession has seemingly gone wild upon serum therapy, without reference to cause or effect, and without demonstrating its utility or practicability; it has rushed from one theory to another, year after year. Some thirty years ago Dr. Bergmann, a physician in London, startled the world by his discovery of a cure for consumption, by means of sulphuretted hydrogen rectal injection. The country went frenzied about it, and in the United States, every one was making apparatus for its production and use. The bubble soon exploded; and it was observed that the scheme originated from the fact that relief was obtained by the local effect of this gas upon the rectal-mucosa. Brown-Sequard was the next in line with his goat lymph, which induced abscess after abscess; blood-poison following so often, that physicians who had used it were glad to seek cover to escape malpractice suits. Murphy, of this country, followed with his wild theory of injecting iodine into lung tissue. Great sensation was aroused in the American Medical Association, until this bubble exploded in like manner, and he, too, sank into gentle oblivion. Dr. Keyes of Chicago followed in their path with injections of oils, pretending to cure consumption or tuberculosis. Of recent date is the Friedmann and Duckett mendacity, with many others along the same lines. "606," or "Salvarsan"—the "arsenic treatment" as it is termed (nine grains of arsenious-acid injected into the vein at one time), startled the world as a cure for syphilis some few years ago. It is unnecessary to state the number of deaths which followed, nor is it pos-

sible to compute how many have been carried from hospitals at night and secretly buried. An interne of a prominent hospital, who noted its administration for a year, told the writer that often three and four patients were killed daily, and the number of blind and maimed by its use are too numerous to count.

It seems strange that these various tests could not have been made and discarded at home or in hospitals, before being launched into publicity, and resulting fatally in so many cases. As before stated, the writer has substantiated each step of his own method thoroughly, and that for more than a quarter of a century. They have been demonstrated by physiologic laws to be the true premises, deductions and conclusions, and have been proven by many thousands of clinical cases.

ERRONEOUS DIAGNOSES

The number of mistakes made in diagnosis is really appalling to anyone who has closely observed and recorded such. In truth, I do not believe there are on the average, two per cent of correct diagnoses made by physicians in general. This fact has become so apparent that it is now usual for physicians to send their patients to surgeons to be operated upon in order to clear up the diagnoses. Especially is this true with abdominal troubles. As Dr. E. L. Keyes truthfully remarks, "there have as many instruments been invented and made for removing the prostate as would sink a ship."

I do not think it would be exaggeration to state, that enough healthy ovaries and healthy appendices have been removed to sink a ship. Of the many chronic cases that have come to the writer for treatment, giving the diagnoses of different physicians, I do not believe that one-half of one per cent of them have been correct.

These included many cases of prostatitis, cystitis, vesiculitis, pyelitis, and heart, nervous and abdominal complications; and especially cases where the urine was loaded with mucus and pus. Most of these latter cases were classed as "Bright's Disease." The term "Bright's Disease" as it is generally understood by both the profession and by laymen is quite an elastic one, and includes practically all those diseases of the bladder, prostate, seminal vesicles, pelvis of the kidney and other conditions that give rise to a muco-purulent deposit in the urine. There were many cases, however, of pyelitis, where the pelvis of the kidney had been involved for many years, without giving rise to interstitial nephritis, or true parenchymatous inflammation of the kidney.

It is somewhat humiliating—or at least, it grates upon one's vanity—to have to acknowledge having made incorrect diagnoses; yet this should not be, as we profit most by our errors, and one should not make the same mistake a second time.

A distinguished diagnostician of New York City was bold enough to recently publish an article on "A Study of Mistaken Diagnoses," giving statistics of one thousand (1,000) cases examined and treated before death and in each case followed by an autopsy; and comparing the first diagnoses with those found after death. In this report, published in the J. A. M. A., the diagnoses, including the most common and simple of diseases, as the writer states, "where even a tyro in medicine could record at a glance," only an average of 50 per cent were correct. In some of the obscure diseases like nephritis, pericarditis, myocarditis, etc., there were only about 16 per cent of the diagnoses correct. That is, there was less than one correct diagnosis, to six erroneous. Now, if a man of his recognized superiority as a diagnostician,

and with his special clinical opportunities, makes that many errors, what can be expected from the ordinary practitioner, especially in regard to kidney, heart and obscure nervous diseases. Even in the 16 per cent of correct diagnoses in heart, liver and kidney diseases, the causes of these different diseases were not given.

The following are a few of twenty quotations that were compiled by a "professor" in a Chicago medical college, and published in the June, 1910, edition of the Medical Brief, in answer to: "Is the Practice of Medicine a Science?"

"The present practice of medicine is a reproach to the name of science, while its professors give evidence of an almost total want of true knowledge of the nature of proper treatment of diseases. Nine times out of ten our miscalled remedies are absolutely injurious to our patients, *suffering under diseases of whose real character and cause we are most culpably ignorant.*"—Jameson, M. D.

"The reason medicine has advanced so slowly is because physicians have studied the writings of their predecessors instead of nature."

"The older physicians grow, the more skeptical they become of the virtue of medicines and the more they are disposed to trust to the power of nature."—Alexander H. Stevens.

"The science of medicine is a hopeless assemblage of inaccurate ideas, of deceptive remedies, and of formulæ as fantastically conceived as they are tediously arranged. an incoherent assemblage of incoherent opinions."—Bichat, M. D.

"I tell you, what I say is the truth of God. I am an old physician, I am an old professor, but I want to tell

the truth. We are guessing in the dark, and there is no such thing as medical science.''—Douglas MacClagan, M. D.

''Medicine is a great humbug. It is nothing like science. Doctors are mere empirics when they are not charlatans. We are as ignorant as man can be. I tell you frankly I know nothing of medicine. I repeat to you; there is no such thing as medical science.''—Magendie.

''I firmly believe that if the whole materia medica could be sunk to the bottom of the sea it would be all the better for mankind and all the worse for the fishes.''—Oliver Wendell Holmes.

Similar opinions could be quoted *ad nauseam.*

Numerous letters have recently come to the author of this book asking why he did not belong to the American Medical Association. In reply: there is no physician in the City of Chicago who practises medicine in a more ethical way than the present writer; but for many years he has been aware of the fact that the A. M. A. had degenerated into one of the most flagrant political machines in the country. This opinion is corroborated by statements by Dr. Lydston, who has been for many years past a member of the A. M. A., in the Pacific Medical Journals, as well as in numerous pamphlets. The A. M. A. is ''run'' by its ''peerless leader'' (who procured his medical degree practically by proxy) for his own personal aggrandisement, and that of some twelve or fifteen other ''leaders!''

The law courts have recently sustained the allegations of Dr. Lydston against the A. M. A., especially in regard to its irregularities.

The writer has been frequently solicited to join the association, but he has always declined; stating as a reason that he cannot understand how any self-respect-

ing physician can conscientiously remain a member of the association or its subsidiary state societies, so long as it is conducted in its present manner. It was stated that the object in procuring additional membership was mainly to get the association out of control of this clique.

It is a lamentable fact that the surgeons chiefly control the organ of the A. M. A. This journal let an article slip into its columns by Dr. Bayard Holmes, who therein states: "Modern aggressive surgery has made the hospital into a hotel for the temporary care of the vivisected. All that the surgeon cares for is a room for his patient to occupy during the three or four weeks he is recovering from the incisions. He may then go home and get well, or lead a life of invalidism, as it happens." In answer to a rebuke for daring to publish such an exposure, the editor replied "that the statements would not have been published had their import been realized."

Dr. James Rigby of Preston, England, writes on the same subject, as follows: "There has arisen a class of surgeons, callous and indifferent to the true welfare of their patients, whom they look upon merely in the light of subjects to be experimented and operated upon. These surgeons, regardless of age or any other deterring consideration, have no hesitation in embittering the last moments of their patients, by operations, often under the specious plea of giving them a chance; thus, what should be a peaceful deathbed scene becomes converted into a seance of operating surgeons and nurses, to whom the suffering patient is merely "an interesting case." Dr. Rigby was severely censured, though the facts were not denied, by the British Medical Journal, which stands in the same relation in Europe that the J. A. M. A. does in this country.

Dr. Waite, in an article in the Medical Record, one of our most prominent independent medical journals, on "The Surgical Situation," writes: "The time has come when a reform is bound to be inaugurated. If it does not come from within it will come from without. If we do not reform ourselves we will be reformed, *nolens volens*. The laity are not all fools, and the surgical situation is no longer a professional secret. Putting aside all questions of ethics, of our duty as a profession toward a confiding laity, the law of self-preservation forces us to take up this question in earnest."

The predictions of Dr. Waite are evidently coming true, inasmuch as some of our Western states are legislating against this injudicious and indiscriminate butchery by surgeons. A provision has been agitated, if not passed, in the legislature of one of the Western states, where if a surgeon is caught removing a healthy appendix he is to be prosecuted criminally and made to serve a term in confinement.

The key-note upon this subject was sounded by Dr. A. Jacobi of New York. In an address by him in the International Congress at Rome, April 4, 1894, on "Non-Nocere" (do no harm) he said: *"The relative impunity of operative interference accomplished by modern asepsis and untisepsis, has developed an undue tendency to, and rashness in, handling the knife. The hands take too frequently the place of brains. Who does not know that the alleged safety in operating tempts some of our skilled operators and the credulous public into useless, or even contraindicated procedure?"*

In the dedicatory address delivered in the Senn Hall, December 17, 1902, by Sir William Hingston, Professor of Clinical Surgery at Laval University, Montreal, he gave warning that the surgeon's knife may be used too

frequently. In part he said: "The immunity with which the most formidable operations are performed has given confidence—might I not say recklessness, possibly?—which renders the staying hand of the physician of priceless value."

Damage once done by the knife is irreparable. "Rather bear the ills we have than fly to others that we know not of."

The Author does not wish it understood that he condemns the use of the knife under all circumstances. On the contrary, he maintains that operations in some cases are absolutely essential. He advocates that it is the inviolable duty of every physician, in whom the credulous patient confides, to exhaust every other means for relief before advising him to go under the knife.

INTRODUCTORY

All substances, whether organic or inorganic, and whether atomic, molecular or large planetary bodies, contain an imponderable fluid, known as electric potential, that exists either in a positive or negative state. Bodies sufficiently charged with this fluid, when brought into close proximity to one another, will, if they contain like forms—both positive or both negative—repel each other; if, however, they hold unlike forms—one positive and the other negative—they will attract one another. Hence the universal law of attraction and repulsion, as applies to electro-magnetism, that likes repel and unlikes attract. The molecules of all bodies have these forces so evenly counterbalanced, by virtue of the attractive and repulsive power of each individual molecule, as to hold these fluids in a state of perfect quietude, and it is only when this equilibrium is disturbed that the electric current is manifested.

If this equilibrium is disturbed by friction it produces what is known as static, Franklinic, or frictional electricity; when disturbed by chemic action, or the revolving of a helix in the field of a magnet, it produces the galvanic or dynamic current. The faradic, high frequency, and other currents are produced by modification of these.

All substances do not contain the electrical potential in the same proportion; in fact, they differ very much in their degree of potency; so that one of a higher potential is always positive to one of a lower that is negative. Hence, a body may be positive to another of lower poten-

tial that it is negative, yet negative to a third of higher potential that is positive. For example: zinc is positive when coupled with copper, but it is negative when coupled with sodium; while copper, though negative when coupled with zinc, is, when coupled with carbon, positive. The electro-motor force of each atom or molecule is thus merely relative to that of other atoms or molecules.

The same applies to larger bodies, as the earth, moon, sun and other planets, and it is by means of this relative inherent force, in each, that the attractive and repulsive forces of one acting upon the others are so equally counterbalanced, that it is one of the main agencies that serve to maintain all these different bodies in their positions.

The electro-motor force exerted upon the earth by the moon, sun and various other planets, often becomes disturbed; and the disturbances are manifested in various ways. A disturbance not only influences the conditions of the weather, tides, etc., but it also influences, under certain conditions, the electro-motor force as it exists in our bodies. By way of illustration—one maintains his health when he is subjected to normal conditions of the atmosphere or media around his body (through which the passage of a current from the atmosphere above to the earth below is constantly taking place), when the air or conducting medium is comparatively dry and a poor conductor; but when the air or medium becomes damp, and consequently a better conductor of electricity than is dry air, it so disturbs or depletes the body of its normal amount, that it brings about depression, languor, etc., and the subject will complain of "rheumatic pains." This is evidently due to the fact that the atmosphere or media surrounding a per-

son when it is moist favors the conducting or depleting of the normal amount of electricity from his body, by means of induction, convection or conduction; and the body of one in such media may become so depleted, as to bring about the above described condition. This indubitable fact has doubtless been observed by many laymen as well as by physicians, especially in old men, where certain conditions so lower their electro-motor force or vitality as to be manifested by aches and pains. Almost any one can recall incidents of old men saying that "there is going to be a storm, or it is going to rain," as their corns hurt them, or as their "rheumatic pains" indicate, but few know the real cause.

All planets, including the sun, earth and moon, vary in their electro-magnetic properties. This variation is due largely to their internal composition; some containing more or less matter possessing magnetic properties, like "lode-stone" or similar material, which is capable of being rendered magnetic by electric accumulation and thus rendered capable of giving off electric or magnetic power. Owing to the variation in the internal construction of the different planetary bodies, they may also vary with reference to their electro-magnetic properties; owing to which, a small body may exert a greater electro-magnetic potential than a larger body. The different planets are therefore reciprocally attractive or repellent one to another, this being conditioned by the arrangement of their poles. When the positive pole of one planet is in close proximity to the negative pole of another planet, they are mutually attracted; whereas if their like poles, both positive or both negative, be in close proximity they will repel each other. Therefore, the action of the different poles of these planets upon each other, one attracting or pulling, the other repelling or pushing, causes thereby

motion, rotation or movement in different directions; and also maintains these bodies, suspended as it were, in vacuum or ethereal space, or may be surrounded by air or other gases; which may favor this constant motion by overcoming, as much as possible, the resistance that might be offered by the surrounding media.

This may be illustrated by a storage battery; except that the storage battery is only capable of receiving and maintaining the electric current and is minus the magnetic properties possessed by the earth or other planets; owing to the fact that the storage battery does not have similar ingredients in the way of "lode-stone" to maintain and give of magnetic properties. Dynamos and electric motors are so constructed as to be rotated by means somewhat similar to those which cause the revolution of the planets.

The consummation of such colossal achievements could not have been effected by any other than by a supreme being or Deity. No human being could possibly have conceived of, or perfected, such wonderful structures, or their movements.

Hydrostatic and atmospheric pressure as exerted by these forces and arising from the revolving of the earth, sun and planets, causing water to seek its level, and overcoming the cohesive power of its molecules, necessarily gives rise to various tides, and to other conditions, that so affect the atmosphere, or surrounding media of human beings or animals, as to cause various manifestations of functional disturbances and aggravate pathologic conditions in living creatures.

Many doubtless remember the treatment of Father Kneipp, of Bavaria, which he introduced to the world some twenty or more years ago. He was visited by people from all parts of the world for the purpose of undergoing

his special treatment. This consisted mainly in the patients baring their feet, and walking over wet grass or upon the wet ground, for some little time; then retiring and resting for an hour or two, the length of time being dependent upon the strength of the person and other circumstances. Although, as I now recall, his treatment did not include the administration of medicines, he did institute some other form of treatment in connection therewith, which I do not think had any therapeutic virtue.

In connection with the line of thought heretofore detailed, regarding the passage of the current between the earth below and the atmosphere above, the real benefits that were derived from Kneipp's treatment by his patients (and there were many *authentic cures reported*) were the result of drawing upon the stored-up electromagnetic force in the earth, which was imparted to the patient by means of the moist grass or straw, which facilitated the conducting of the current to the patient's body.

Most remarkable results were claimed for this treatment, not only in his written reports, which I could not doubt to be reliable, but I also learn personally from some who had been there under treatment, that cases of enlarged liver, rheumatism, and various other forms of disease had been cured, after every other mode of treatment had been tried. One case reported was that of a man suffering with dropsy or anasarca. He, of course, did not know the reason; but as a result of taking this treatment the patient passed many gallons of water, and was reduced in weight 75 or 100 pounds. My informant stated that there were men there, not only from every section of the world, but of every station of life; kings, princes, and prominent men of every profession or business were taking the same walks in their bare feet over the wet ground.

There have been other systems somewhat similar to that practised and originated by Father Kneipp, throughout this country, as well as in Europe; but usually they were given empirically, and by unreliable physicians.

A few years ago, in a certain little park in the suburbs of New York, could be seen thousands of men and women, suffering from all forms of diseases, and walking to and fro, especially after a rain. They walked nearly all night. Reports were prevalent that great relief was received by many from following this mode of treatment.

Realizing the great electro magnetic forces of the earth, and the changes effected thereby, the writer has constructed apparatus to utilize these forces towards relieving morbid conditions, and to restore new vigor to man.

This apparatus consists of a wire attached to a conductor extending high in the air, and so arranged as to draw the positive electric current from the atmosphere high above the earth, and convey it through an insulated reservoir containing either medicine, where specific purposes are desired, or it is simply conducted through this reservoir with sufficient resistive force to render it perfectly safe, before being applied to man for special therapeutic purposes. The same general principle is used in obtaining and using a current from the earth.

This instrument is not intended to take the place of the special treatment, where organic disease or lesion of some organ exists as a cause. Its properties or effects consist mainly in supplying defective electro-magnetism of one kind or the other when the body is depleted of such by over-exertion, either bodily or mental; or where there is defective metabolism, due to a deficiency of one form or another of the currents, as superinduced by the same disturbances, or from any form of shock, sorrow, etc.

Caution must be exercised in utilizing the earth's current, as well as that of the atmosphere, so as to prevent getting an overcharge or shock, that might prove serious or even fatal. History gives us an account of Benjamin Franklin's serious shock in experimenting with the lightning rod, by breaking the current from the ground into his office, whereby he received the full force of the shock, which, although not fatal, was of sufficient severity to stun him.

The writer has experimented with both the atmospheric and the earth's currents by passing these separately through his body after he had been thoroughly insulated, at the same time having within a glass, porcelain or rubber container, serving as an insulator, a medicament in solution through which the current passed before reaching the body, thereby effecting cataphoresis.

In other instances the current alone was utilized; when a certain polar defect, (positive or negative, depending upon attachment to the atmospheric pole or to the earth's pole) would remedy a deficiency of the special current which was lacking in the body; and in other instances, depleted the body of an excess of a certain other kind that had so accumulated and been retained as to cause hyperesthesia and nervous irritation. This disturbance usually affected a ganglion, which by reacting upon the central nervous system, resulted in too much nerve agitation. This latter condition induced an excessive waste in animal tissue, causing either depression or excitation; and gave rise to various nervous disturbances, manifested by insomnia or disturbed sleep; this causing one to arise in the morning feeling as if he had not been in bed at all but had been working all night, and not at all anxious for the performance of his daily duties.

CELLULAR DEVELOPMENT.

Brief reference to cellular development of organic matter pertaining both to animals and plants, is prerequisite to a thorough elucidation of metabolism, or constructive and destructive changes of matter. As is generally known, all organic matter arises or originates from cells. These cells develop only after fecundation by processes of division and multiples of division. Some

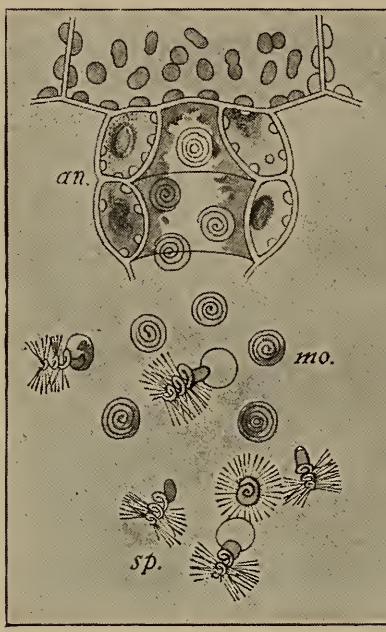

FIGURE I.

FIGURE II.

plants, like many of the lower order of animals, develop either by gamogenesis (sexually) or agamogenesis (asexually), and some by both processes. Even in agamogenic plants both male and female germs may be produced. The development of the plant is somewhat similar in its anatomic and histologic construction and physiologic function to that of animals.

The first figure shown on opposite page (taken from Luerssen), represents a full developed antheridium (an) containing the male germs (mo) of the plant, which are pictured as escaping from the antheridium. When they first make their escape, they have the appearance of a complete cell, as illustrated by "mo." These latter finally rupture, and the germs assume the shape somewhat of a corkscrew (sp), with flagellum.

The second figure illustrates the female germ, or archegonia (after Strassburger), showing the escape of a round cell, oosphere (o) emerging from the archegonia, similar to the ovum within the uterus of a female. This shows, too, a crude construction of parts somewhat similar to that of the uterus, vagina and an exit (labia) through which escapes a mucilaginous fluid (m), issuing from the mouth of the canal, or crude vagina, whose function is similar to that of the mucus of the human female. This secretion of the plant is considered by botanists to entangle the spermatozoids, as they *accidentally* come in relation with it; but in fact they are attracted toward "m" by their electro-magnetic force, which is opposed to that of the oosphere; and after becoming fully developed they make their way to the oosphere (o). In the development of the male and female germs, the latter precedes the other by some days, which is a provision of nature to prevent the spermatozoids that have preceded the female germs, from the same species, from impregnating these, in order to prevent inbreeding or self-fertilization, and to favor cross fertilization by being fertilized by a succeeding male germ subsequently developing. This preventative measure in plants should be a warning against the intermarriage of close kin among humans. It is interesting to know by what force the spermatozoids, or male germs,

reach the oosphere or female germ; and upon this point hinges much of what will hereafter appear as a force in nature, causing not only chemic action throughout the body, both in relation to anabolism and catabolism, but also with reference to the various modes of reproduction, growth and the maintenance of life. Investigation has revealed the fact that the male and female germs in both animals and plants vary in electro-magnetic force, and are attractive to one another, by reason of their possessing different electro-magnetic properties.

One may note the peculiar analogy of the anatomic and histologic construction of organs (though in crude form) of vegetables, as compared with those of animal organisms. Their functions are also somewhat similar; with the exception that the motor force as directed, by way of conveying material for growth and sustenance in plants is different from the force which conveys the materials of animal life. The vegetable derives its force through electro-magnetism, almost exclusively; by means of which various gases, absorbed by the chlorophyll of the leaves, are conveyed to the roots; and the inorganic matter being there converted into organic matter is conveyed through the same force and conducting media,

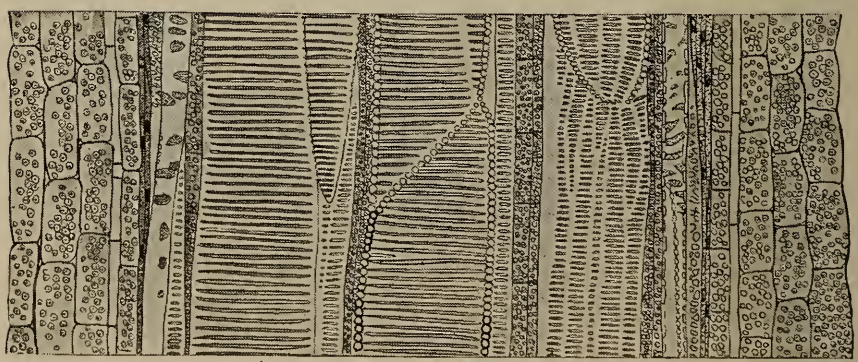

FIGURE III.

(the sap), back to the trunk, limbs and leaves, after being elaborated at the roots by the convergence of the positive and negative electro-magnetic forces.

The above figure illustrates a longitudinal section of a fibro-vascular structure of wood, which shows a number of channels, tubes and sheaths as they pass up and down through the fibres of a tree, which is somewhat similar in arrangement to that of the vessels of the human body, with the absence of nerves. The passages scattered throughout the structure of the wood, admit of the transmission of air, or gases. There is also illustrated in this same figure, phloem-sheath, which contains cells of starchy matter, proteids, etc. In brief, the various channels as illustrated show the passage of fluid (sap) which dissolves and carries the raw material absorbed by the leaves (different gases, CO_2 or carbon-dioxide, nitrogen, oxygen, etc.), to the roots. These gases are simply absorbed by the chlorophyll of the leaves and are not chemically decomposed thereby. It is utterly impossible for the coloring matter (chlorophyll) alone to effect chemic changes, either by way of analysis or by synthesis; but the raw materials are conveyed by means of the sap to the roots, where chemic changes are effected by the decomposition of CO_2 liberating oxygen, and converting the carbon into carbohydrates and other substances; and, by double decomposition and recombinations, by way of analysis and synthesis, and by the utilization of nitrogen, proteids are formed from the earthy salts.

The various nitrates, sulphates, and chlorates of sodium and calcium, or lime salts, exist naturally in the soil. Carbonic dioxide is decomposed and utilized by the roots of the plant, where it comes into relation with these various elements—the carbon uniting in the forma-

tion of hydro-carbons, and setting free some oxygen; oxygen forming new chemic compounds in the plant, by combining with nitrogen in the formation of proteids.

Heretofore, it has puzzled scientists to know how fluids and other substances pass from the leaves to the roots and back again to the leaves; also they attributed the chemic changes before mentioned altogether to chlorophyll and kinetic energy. Yet they have no proof that these agents are capable of effecting either analytic or synthetic changes. But we do know, and can prove, that these chemic changes can and do take place at the roots of the plant, where the positive current of the atmosphere and the negative of the earth meet. It has been claimed, too, that this material passes from the leaves to the roots, and back again from the roots to the leaves, mainly by *capillary attraction.* It is utter folly, without going into detail, to make such a claim for such a force. It is true that, by means of capillary attraction, atoms or molecules of water or any soluble chemic compound will pass one-half to two or three inches probably; but the idea of its passing a hundred or more feet up a tree, is unreasonable, and is utterly in violation of physical laws, and devoid of proof. It requires no stretch of the imagination or theory, to show and prove that the passage of an electric current through electrolytes or chemic compounds causes different chemic changes by way of analytic decomposition and synthetic combinations and at the same time the conversion of these into fibrous tissue, causing the development and growth of the plant or tree. It is also a fact that we do have practically at all times, the passing of an electric current from the atmosphere above to the earth below. The moisture that accumulates upon the leaves, as the result of dew at night, favors the passage of this

current through the leaves and plant; and at the same time, the solution, absorption and conveyance by chlorophyll of carbon dioxide, and other gases through the plant in order to develop it by means of the various chemic changes in its constructive and destructive forces, as heretofore explained.

THE MOVEMENT OF PLANTS.

Botanists, as well as others, who have paid special attention to flowers, plants, vines, etc., have noted a property inherent in climbing vines of being attracted to adjacent objects. That is, if a pole or stick be in close proximity to one of these climbing plants, the plant will make its way to this object, if be a foot or more distant. It is claimed by some, that this is a kind of instinct or principle inherent in the plant itself. Others mention it as selective power. In point of fact, it is due to the same electro-magnetic law of attraction and repulsion already mentioned; and the stick being magnetized, though mildly, by the passage of the current from the air or earth, and this magnetism being different from that of the plant, it is attracted thereto. This principle has also been plainly demonstrated, by means of what is termed the "timber line in high altitude," as it is a known fact that when the altitude is above 11,000 or 12,000 feet, trees and vegetation practically stop all vertical growth. Although the same influences exist, the moisture and other surrounding media being the same as that of trees below this altitude, yet, at or above this line, there is a neutral point. By way of further explanation, the positive current from the atmosphere comes to the earth below that of the negative of the earth's current, or the convergence of the positive current with that of the negative takes place below the

surface of the earth at this altitude. Hence, the surface of the earth at this point would be so far distant from the positive or negative as to be neutral, and the current would therefore be unable to effect chemic changes; nor could it convey the sap, along with its nutritive matter, above this neutral point. As the negative current from the earth does not pass beyond its point of convergence with the positive, it cannot carry substances up the tree or plant, so far as it does in lower altitudes. The limbs will grow long, and extend out over the earth, but not high on the trunk. I have closely observed this fact in the high altitudes of Colorado, where large trees even six inches or a foot in diameter do not rise to a greater height than six or eight feet. This has been a strange and unaccounted for phenomenon by the natives and by scientists so far as I know, and it is only since discovering the effect of the atmosphere and earth's currents upon vegetation, as well as upon animals, that I have been able to ascertain the true causes.

This phenomenon also proves the fact beyond question, that it is by means of the electric currents passing from the earth to the atmosphere, and from the atmosphere to the earth, through the media of the trees (especially when wet or moist, they then being better conductors than the atmosphere), and also through the sap contained within the channels between the meshes of wood, which serve as comparatively good conductors; by these means nutritive material is carried to the tops of trees, as well as to the roots below. It is evident, therefore, that above "timber line" the trees cannot grow in height; they are therefore large in circumference, but not tall. This is a very potent fact; and in truth, is one of the absolutely postive proofs of the truths heretofore detailed, regarding the action of these cur-

rents and the stored electro-magnetic forces of the earth as a storage battery upon organic structures; and this action takes the place in trees and vegetation of the heart's action in animals.

CONSERVATION OF ENERGY.

It is conformable to fact in the conservation of energy that light, heat, motion and electricity are convertible forces. This may be considered in the same light as that of matter being interchangeable into gases, liquids, solids, etc., without loss. These materials all exist in the human body, under healthy states, in definite proportions and quantities. When in normal condition the body remains constantly at the temperature of 98½ F. There is no question but that electricity in the human body remains normally in a fixed definite quantity with reference to positive and negative. Certain conditions, by way of lesions of organs, causing a perverted function and increased action of these organs, which excite the nervous system, may give rise to an abnormal accumulation, either of both positive and negative currents, or that of one in excess of the other. I recall a work, which I regret to state has since been lost, published more than a century ago, and far anticipating its time, on "THE VARIATION OF ELECTRIC TENSION IN THE BODY THE CAUSE OF DISEASE." The author mentioned the fact of the depletion of the body, by means of atmospheric and telluric influences, bringing the positive or negative below that of normal, thereby precipitating disease. He gave as an illustration, that cholera is very rare among men who live in affluence, in houses carpeted and protected by insulation; while the poorer class who live in huts, and often in houses with the earth as their floor, where conditions favor the lowering of a certain

form of current, thereby are rendered liable to attacks of that particular disease. He also claimed that the insulation enjoyed by the rich was not wholly beneficial, as it gave rise to an excess of current of positive nature, which caused (said he), undue oxidation and nervous irritation, and rendered the subject peculiarly susceptible to yellow fever. On the other hand, the poorer classes, who live usually much nearer the ground, were especially immune from this disease. The idea was, to say the least, very ingenious for the time, illustrating the depletion or over-accumulation of the positive or negative currents, as influenced by certain atmospheric or telluric conditions, bringing about these abnormal states, and being at least the exciting causes of different diseases.

Regarding the normal electric current as it exists in the body—it is a fact that electricity is evolved at all times by chemic combinations, either in constructive tissue-formation or in destructive degeneration. It is equally true that chemic changes take place in constructive formation, as a result of the convergence of the positive and negative currents. Whether *all* changes, in the way of construction and destruction, result from the effect of electricity in the body in definite proportions, and by the union of the positive with the negative, and in accord with the mandate of the sympathetic ganglia controlling the special organ, is a question. We do know that chemic changes take place as a result of these conditions, and there is no proof that chemic combination results from any other cause.

It is well known that living in tents which are pitched on the ground is conducive to health; this arises, as in the instance of Kneipp's patients, from one being practically night and day in the closest contact with the earth. A hen with a "lost nest" in some out-of-the-way

place on the ground, hatches out her brood of chicks without the loss of a single egg, under the influence of the same principle; whereas a setting of eggs in an incubator which is properly insulated from the earth's current is seldom sure of being successfully hatched. It is an unquestioned fact that incubator chicks are never so strong or healthy as those hatched by a hen. Turtles deposit their eggs in moist sand—the moisture, acting in conjunction with the sun's warmth and the magnetic current from the earth never failing to bring about a successful result.

Fishes, also, thrive while in the streams, subjected to telluric influences; but when placed in an insulated jar, it matters not how much they may be fed, they thrive or grow but very little, if any. All these illustrations bear upon the one point, which has been further noted and demonstrated by the writer, in various ways.

The current always passes from the positive to the negative, that of the atmosphere being positive, as proven by the phenomenon of lightning always passing from above to the earth. Its zig-zag appearance depends upon the variations of moisture in the atmosphere above, parts of which being comparatively a good conductor, while the other part is a poor conductor. It must, therefore, be remembered, that although the surface of the earth is considered the juncture of the positive with the negative, yet, this does not take place absolutely at all times upon the surface of the earth. It may take place several feet above or several feet below, depending upon the conditions of the moisture of the atmosphere or the conducting media through which the current passes in its transit from above to the earth. Although it may be somewhat convenient to consider the surface of the earth as negative, compared to the atmosphere's positive,

yet it must be remembered that electro-magnetic potency is relative and largely due to internal construction, and variations of conductibility.

To briefly summarize: Nature has provided a force which the earth utilizes; first by vegetative growths, by which inorganic substances are decomposed; by means of the gases existing in the air, these are brought into relation with the inorganic substances of the earth; by decomposition and recombination of various molecules, new chemic compounds are formed, and by these vegetative life or plants transform inorganic substances into various intricate organic compounds.

There is a constant cyclic rotation of changes between vegetative growth and animal, one utilizing what the other throws off; and where there apparently is a waste of substance, by consumption, yet, it is merely conversion of one substance into others without any loss of matter. This change has been going on ever since the world began; and the indications are that it will continue.

About thirty years ago the prevailing mode of treating prostatic diseases was by use of sounds, the knife, the Bottini cautery, etc. Having followed the teachings of these eminent surgeons for some years with very unsatisfactory results, I began experimenting with local and constitutional medication, electrolysis, and cataphoresis, for the purpose of stimulating vaso-motor contraction, relieving thereby congestion and inflammation, dissipating morbid tissue and chemically decomposing or breaking up lime or earthy concretions that form in the ducts and follicles.

I do not wish to convey the idea that I limit treatment entirely to medicines, electrolysis, cataphoresis, etc., as there are some few cases in which the use of the knife is indispensable. I am fully aware of the incredulity

of the profession regarding electrolytic treatment, since the use of electricity for medical purposes has for so long been in the hands of charlatans. It is true that electricity, like other potent therapeutic agents, has been no exception to the rule of having had over-enthusiastic advocates, who (at first, when its principles were little known, and before it had been placed upon a systematic basis), claimed for it properties and powers beyond its field of utility, and would have had it supplant every other mode of treatment.

Others, whose lack of knowledge of the science of electricity is due to the fact that it was not taught in the medical colleges at the time they graduated, are prejudiced against its use in any form or for any purpose. They are content to grope in the old, beaten path, however unsatisfactory may be the results.

Even among the practitioners who are using electricity, many have gained their knowledge of it from ordinary electrical mechanics, instead of from educated physicians. These mechanics are utterly ignorant of normal therapeutic properties or dangers. They make and sell batteries and appliances, and as an incentive in promoting the sale of their wares, induce the physician to buy and use them for various purposes, telling them that "they are perfectly harmless if used according to *their* directions, and, especially if the current is measured by *their* milliampere meters." They do not know that there are certain conditions where the use of electric currents, whether measured or not measured, is attended by irreparable harm. The large majority, if not practically all of the books of today written upon the subject of electro-therapeutics, in this country, are from the pen of some mechanic, who has been selected by some prominent manufacturer of batteries, and whom

they dub "professor" in some medical college. One of these "books" (?), which has had, doubtless, the largest circulation of any throughout the country, was written by one of these "professors." This "book" (?) is offered at any price, or given away when a battery or other electrical appliance is bought. Some of the worst cases of stricture, inflamed prostates, prostatic abscesses, X-ray burns, etc., that have ever come under my observation, have resulted from following the instructions of this "professor" (?), who is utterly ignorant of the existing pathologic conditions, or the means for their relief. How is it possible to get definite results, or any but harmful, under the circumstances?

One of these advises in the treatment of prostate ailments: "Pass a copper electrode down the urethra to the prostate, to which attach the positive pole. Turn on your current until you get ten or fifteen milliamperes and the electrode sticks firmly, then reverse your current, turn on the negative pole till it burns considerable, twist the electrode some to loosen it, then hold the negative to the electrode until it is loosened." Now the fact is, that such procedure will cause a firm stricture; besides, the electrode when thus used will burn almost like a red-hot iron, when either the positive or negative current is applied to the electrode. How many men would permit the electrode to remain within the urethra five, ten or fifteen minutes, burning like a red-hot iron? One of these men upon whom the "professor" had operated, came to me, and was strictured from the meatus to the bladder as a result of such treatment. He said the pain was so intense that he could not bear it, and screamed for the man to "take the thing out." It was pulled out with great force, bringing the whole lining of the urethra out with it; when it was found that *"the*

entire insulation on the electrode above the copper end was melted off.'' This gentleman was a skilled mechanical electrician, and knew something of what had been done. Of course, the damage was irreparable, and he will suffer the remaining years of his life.

Following are a few paragraphs from a work on ''Therapeutics,'' containing more than seven hundred pages, in which the author quotes from another ''professor'' of ''electro-therapeutics'':

''Electro-physiology is that science pertaining to the action of electricity on the human body, animals and plants.''

''Electricity as a factor in medicine is measurable with the milliampere meter. It is portable as in case of the secondary battery, and many of its various phenomena on the human body are manifest.''

''Electricity in mankind, while the cutaneous currents in the human being have certain laws made concerning the direction in which this current flows, we sometimes find the reverse condition exists.''

When we see such nonsensical statements made by ignorant ''professors of Electro-therapeutics'' can we wonder at the contumely that is shown towards this science by the average citizen, who has neither time nor opportunity to investigate its claims?

In the hands of competent and experienced operators electricity is a most potent factor in removing morbid conditions, although I have seen some serious results follow its application, even by intelligent and prominent physicians, who were not quite familiar with the principles of electro-physics and the methods of electrolysis. It requires experience and tact as well as knowledge to succeed in the treatment of these complicated diseases, just as it does to succeed in any other line of special practice.

As man in general has so modeled after and utilized the laws of Nature as to have effected great mechanical achievements, in like manner has the writer made use of her laws, to effect prophylaxis; to eliminate the ashes of the body; to tranquilize nervous irritability; to remove morbid conditions from deep seated organs which cannot be reached by any other means except through dangerous and often fatal operations; and ultimately to so revolutionize the practice of medicine as to greatly relieve all suffering, and prolong life to the extent of twenty or fifty years.

These statements may appear exaggerated and egotistic to some who are not familiar with my work, yet they have not only been attested by hundreds of clinical results for many years, but most of these facts have been known to thousands of physicians for more than two decades, many of whom have taken advantage of the knowledge, and have been restored to health themselves, but few have permitted their patients, or others with whom they had come in contact, to procure the same relief. The following letter is typical of many similar which fully attest the foregoing statement:

New York, Aug. 5, 1912.

George Whitfield Overall, M.D.,
Chicago, Ill.

Dear Doctor Overall:

It is because of no lack of appreciation of what you did for me when a patient of yours, now four years since this month, that I have failed to write you before. As you are aware you completely cured me of a complication of one of the worst diseases that flesh is heir to. Physicians and humanity should well feel grateful for the great work you are doing. ——— ———, M.D.

During the three years that one of my assistants was with me, I permitted him to compile statistics of the cases we had treated during that time, and give a succint history and report of each.

REPORT.

Number of cases treated	641	Diabetis mel	2
Com. with cystitis	377	Deaths	2
Carcinoma or sarcoma	0	Number complicated with vesiculitis	391
Hemiparesis	5	Proctitis	176
Nervous indigestion	57	Neurasthenia	37
Benefited but not cured	46	Metastatic gon. appendicitis	3
Number with gonorrheal history	462	Prostatectomy (previously performed)	5
Chronic inflammatory enlargement	583	Supra-pub.	2
Syphilitic	5	Perineal	3
Impotency	341	Com. with prostatic urethritis	542
Interstitial nephritis or Bright's disease	3	Tuberculosis	1
Little or no benefit	8	Paraparesis	9
Number with no gonorrheal history	179	Varicocele	497
True indurated hypertrophy	6	Cures	594
Insomnia	22	93 per cent.	
Metastatic rheumatism	63		

There were only three cases of the 641 treated that had interstitial nephritis, though many whose urine was loaded with pus, mucus, blood, albumin and sugar thought they had Bright's disease.

Traces of albumin or sugar were in evidence mostly in those extremely nervous complications.

RECAPITULATION.—Sixty per cent. of males have lesion of the prostate gland before they are twenty. Seventy per cent. of all men have had gonorrhea and lesion of the prostate, resulting from gonococci buried within the gland excreting a poisonous substance which is accountable for nine-tenths of chronic ailments.

Ninety-eight per cent of all men past forty have ulceration of the prostate; which invariably causes swollen enlargement of the gland if of long standing, when it begins to dam up nature's greatest sewer, and a series of grave troubles follow in rapid succession.

Emboli, and other debris resulting in infarctions, cause serious and often fatal results—these deaths occur as a rule very suddenly. Emboli and other forms of debris are absorbed through the prostatic and other ulcers or lesions, and are carried to the heart, the brain or the kidneys, causing more sudden deaths than all other etiologic factors combined. The more-recently discovered lesions described in the book have been ascertained to be the precursors of more obscure serious disturbances, such as neurasthenia, degenerations of heart, kidney, or brain, than any other cause. Vaso-motor disturbances, resulting from the various lesions (including prostatitis, urethritis, etc.), cause, under one condition, excessive alkaline secretion. As a result of this condition calcareous deposits form in the pelvis of the kidney, prostate, and gall bladder. When these are of long standing, and too large to pass out through the various ducts, they become dangerous, and often necessitate an operation that may have a fatal result. Under other conditions vaso-motor disturbances produce acetonaemia and general acid secretions, resulting in uric-acid, synovitis, pericarditis, arachnoiditis, pleuritis, precipitating many premature deaths, the origin of which is never known.

For many years the attention of the entire world has been directed towards the enactment of laws for the enforcement of sanitation and prophylaxis against "The Great White Plague"; while apparently neglectful of "The Great Black Plague," the ravages of which bodes

greater evil to family and state than any other one disease to which the human race is subject. It is the opinion of the writer, who has given almost one-third of a century to the special study, practical observation and treatment of this particular disease, that (taking into consideration the remote effect of this latent germ and its malevolent influences that affect the genito-urinary organs), they cause infinitely more direct and indirect complications, sufferings and deaths than any other one disease. In truth, it is rare for any chronic ailment, functional or organic, to exist for any length of time that it is not caused by, or does not become complicated either directly or remotely with some form of disturbances of these organs.

CHAPTER I.

Brief Descriptive Outline of Anatomy and Histology of Nervous Systems, so far as Pertains to the Following Chapters.

CAUSES AND DIAGNOSES OF DISEASE.

The sympathetic and ganglionic system of nerves have never received the attention that their importance demands, either as regards their functions or from a pathologic point of view.

These ganglia direct and control all the vegetative organs in the body, and each organ has a separate and distinct ganglion or plexus controlling it. When overtaxed they become specially susceptible to morbid conditions, which may result in functional disturbance, or even lesion. The various works upon physiology that the writer has noticed, refer to these ganglia as capable of working incessantly, or "both day and night," as they term it, without rest. This is an erroneous idea, as all organs require from one-third to two-thirds, mostly the latter, of time for rest, as compared with the one-third they work. This error, doubtless, is one reason why these organs have either been neglected or entirely overlooked from a pathologic point of view.

It is an incontrovertible fact that all organs become congested during their state of activity, or during their working hours. Should the duration of their work be extended by morbid excitation, the congestion is no longer normal; but, on the contrary, there is a tendency to stasis or morbid congestion of the organ; and should

this exercise or work be incessant, the congestion results in irritation, and ultimately lesion follows. This applies to any organ in the body. There are two reasons why the sympathetic ganglia become functionally disturbed or pathologically involved more than any other organs. The first reason is that they are so constructed and arranged, by way of close anatomic connection, that lesion of any organ not only affects the ganglion controlling this particular organ, but this disturbing effect is transmitted to other ganglia in close proximity, which also become disturbed, and at the same time causes disturbance, and even lesion of the organs they control. The second reason is, that the coccygeal and sacral ganglia control organs which are more frequently involved in functional disturbance, and even lesion, than any other organs in the body, with the exceptions probably of the kidneys and prostate gland.

Figure IV illustrates the double chain of sacral ganglia in the pelvic region, which becomes primarily affected more frequently than any other ganglia or set of nerves in the entire body. This is due to the fact that it controls and presides over organs which are more exposed. The lower one, "c," the coccygeal ganglion or ganglion impar, is probably the most important, for its size, of the ganglia of the entire nervous system. It is this ganglion that first becomes disturbed when there is ulceration of the rectum, hemorrhoids, py-ro-saks, overticula, or disease of the bladder, prostate and urethra; being in such close relation to the ganglia controlling these organs that sympathetic disturbances frequently occur. Functional disturbance of this ganglion or lesion thereof is transmitted through the double chain to the sacral ganglia above. The disturbance of this ganglion is not only felt throughout the entire ganglionic chain

FIGURE IV.

extending up through the abdominal, thoracic, and cervical regions, but even the brain is influenced by this one little ganglion. In making this statement I am influenced more by its clinical aspects than by consideration of its relations with the other ganglia. There have been many cases of dyspepsia, insomnia, and mental disturbances, relieved by simply finding a lesion of an organ which is controlled by this little coccygeal ganglion.

Continuing upward from the first sacral ganglion on each side of the spinal cord, there is a continuation of this chain of ganglia throughout the abdominal, thoracic and cervical regions, and even within the cranial cavities.

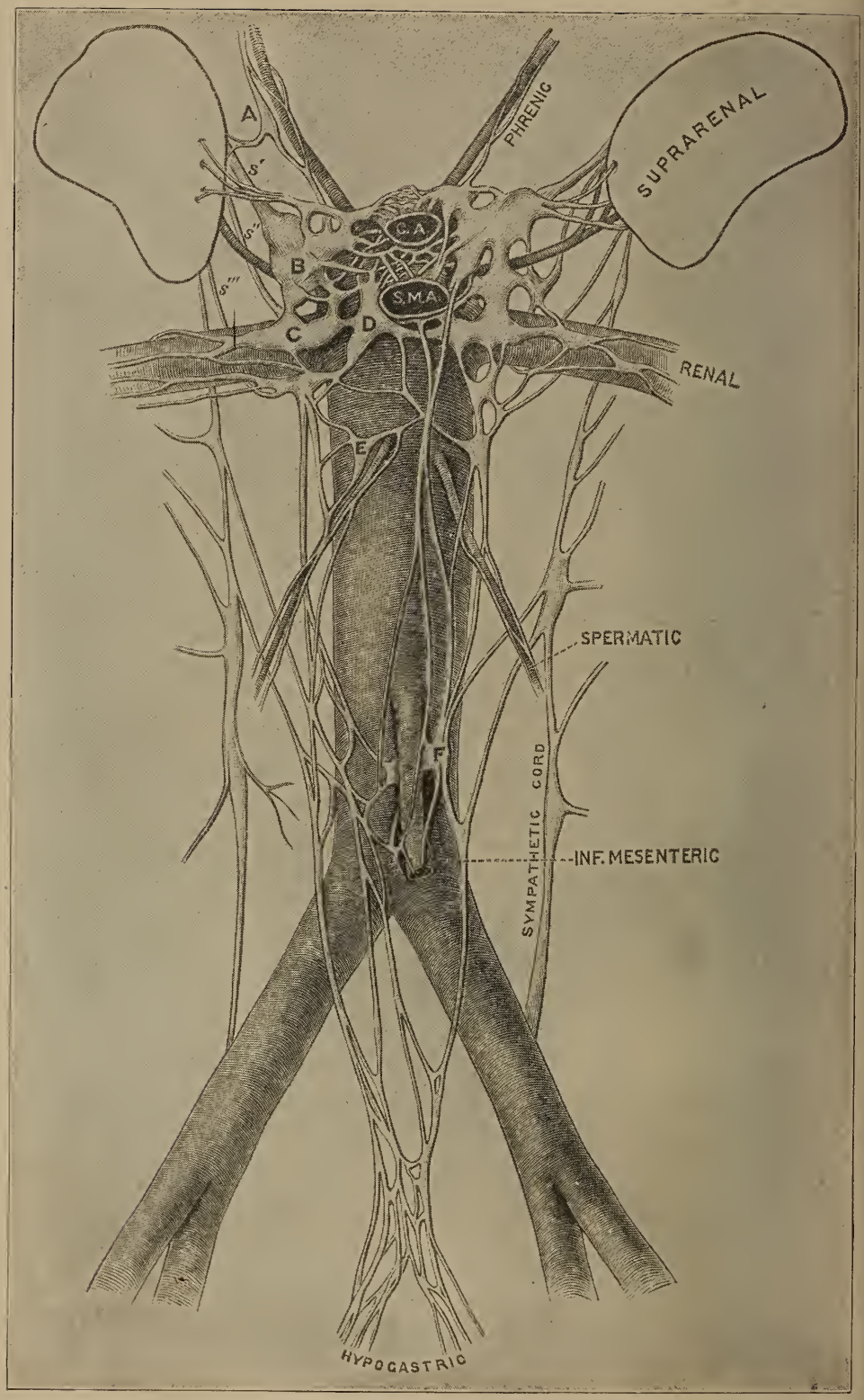
A
B
C
D
E
F
PHRENIC
SUPRARENAL
C.A.
S.M.A.
RENAL
SPERMATIC
SYMPATHETIC CORD
INF. MESENTERIC
HYPOGASTRIC

FIGURE V.

Figure V illustrates a continuation of sympathetic nerves radiating from these ganglia on each side of the spinal cord, forming the hypogastric plexus just below the stomach, then passing upward to the inferior mesenteric and spermatic to the great solar plexus, or "abdominal brain," as it is often termed.

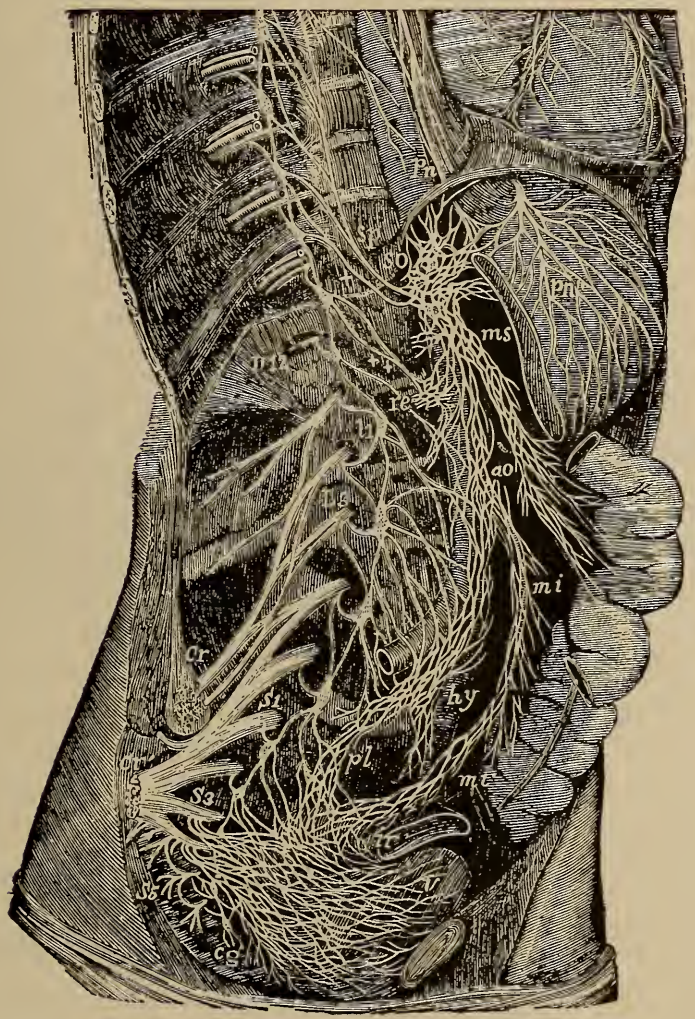

FIGURE VI. (Quain.)

Figure VI, taken from Quain, illustrates still further this double chain of ganglia, as well as the numerous sympathetic fibres, in the regions of the kidney, bowel, stomach, heart, liver, and in fact all the internal visceral organs. This figure illustrates, also, how intimate is the relation and connection of any one of these visceral organs with all the others. It also shows the various blood vessels, the large aorta, as well as its subsidiary branches, which are controlled and often disturbed by an excited function or an organic lesion arising from any organ controlled by these ganglia.

FIGURE VII.

Figure VII illustrates the immense number of nerve connections in the region of the prostate, the rectum and bladder, as well as the external genital organs. Special attention is directed to this cut as points in diagnoses will arise frequently, resulting from nervous irritation of parts of this region. Itching in this region

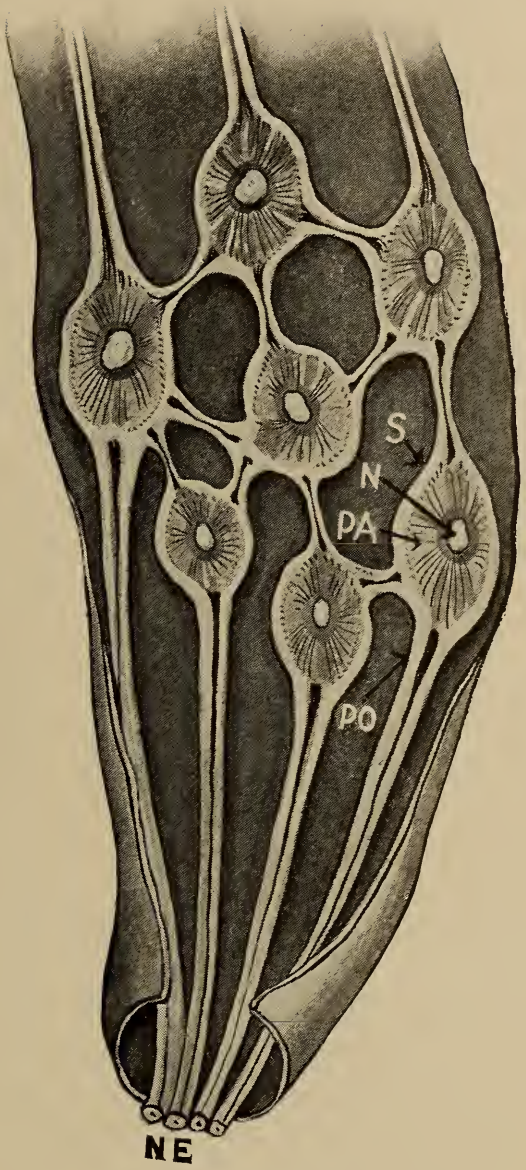

FIGURE VIII.

is pathognomonic of lesion of some organ adjacent thereto, which lesion may be of sufficient gravity as to shorten one's life. It is Nature's flag to warn of impending danger.

Figure VIII illustrates the construction of nerve cells forming these different ganglia, as well as of the nerve cells composing the gray matter of the brain. This cell is magnified four to five thousand diameters; so to get an idea of its size we must imagine at least four thousand of these cells in every square inch. "N" points to the nucleus of the cell; "PA" the parenchyma, while "S" illustrates the sheath surrounding the cell. These cells have one, two or more poles, which serve to connect the cells to one another, and some of these poles extend on out, forming nerve filaments, as "PO." These poles are made up of the central axis and insulating sheaths, which are continued around the nerve filament. One may note the marked similarity of the construction of a ganglion to that of a galvanic battery; and how the nerve passing from a ganglion may transmit nerve force from two thousand or five thousand or more nerve cells. These small nerve filaments have each a separate sheath and insulating material, just as the cord of a battery is protected by an insulating cover. The nerve itself has finally a covering, as is illustrated, that passes on until these filaments are given off separately at their destination.

Figure IX illustrates the great sciatic nerve as it makes its exit from the abdominal cavity out over the hip. As it crosses downwards on the posterior part of the limb, it gives off several large branches. The nerve finally breaks up into small filaments and terminates in cells of a highly sensitive nature. These cells, "S C," illustrate the manner in which practically all sensory

FIGURE IX.

nerves terminate. They are about the same size as brain cells, varying from one four-thousandth to one five-thousandth of an inch in diameter. Close observation of this nerve, and of its terminals, will greatly facilitate the diagnosing of many obscure cases; as it arises from practically all the sacral branches of the spinal nerve "S C" and receives filaments from the sacral ganglia. These latter are so often involved from lesions of the genital organs, the rectum, bladder, seminal vesicles, that they constitute an index as to where to look for the seat of the trouble. This is almost invariably a lesion of one or other of the organs just mentioned; and relief of these organs gives permanent cure to the sciatica, the "bete noire" of the medical profession. I cannot at this time recall a single case that has not been entirely cured by removing the cause as found in one of the organs before mentioned.

The calf of the leg, or the popliteal space, are the most frequent locations indicating trouble, although it may be manifested in any point of this nerve. I have had several cases where the symptoms were manifested in the heel only; other cases were in the big toe or the second toe. Atrophy of the leg and even paralysis is common in cases where this nerve is involved.

Having illustrated and briefly described the functions and locations of the principal ganglia that preside over the general vegetative organs of the body, I shall now illustrate the manner in which they affect the cerebro-spinal or central nervous system.

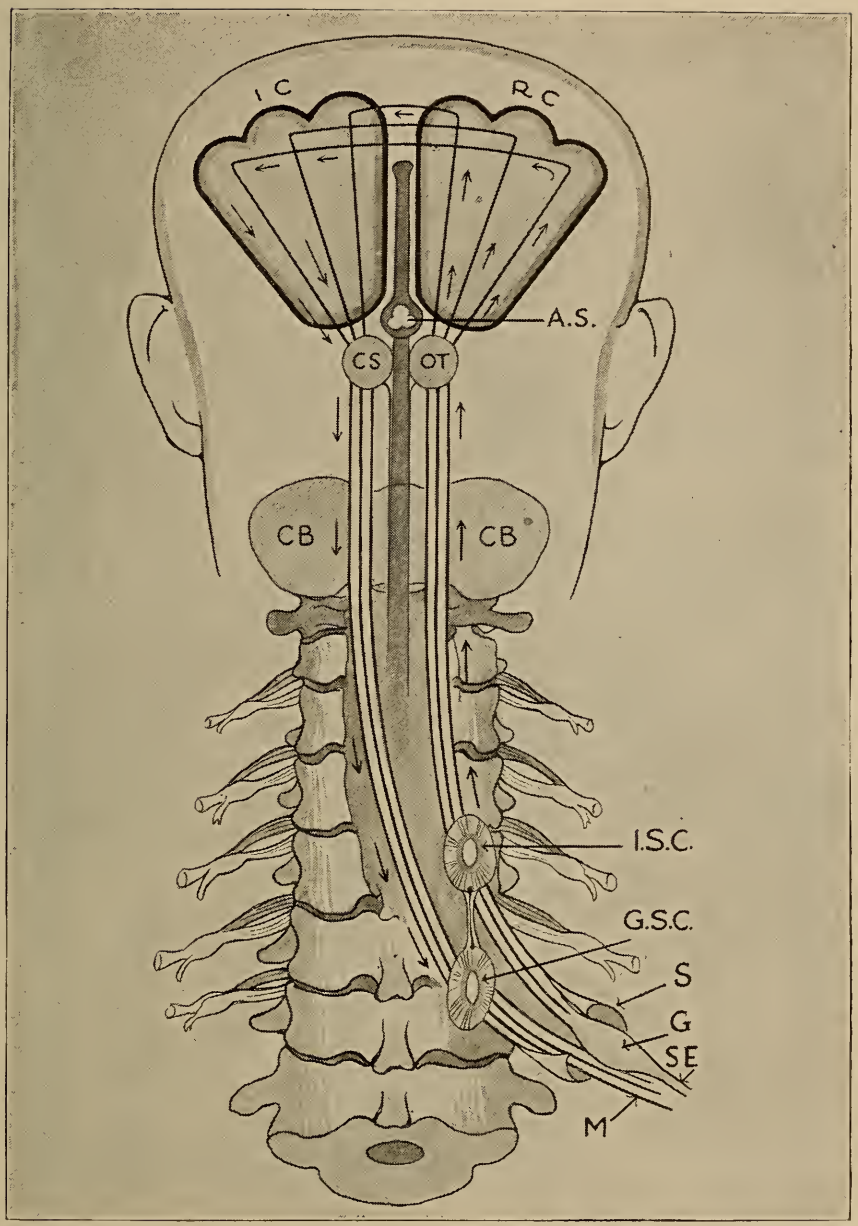

FIGURE X.

Figure X gives a *diagrammatic illustration* of the brain, spinal cord and certain areas therein, as well as the nerves passing to and from the central nervous organism. "I. S. C." and "G. S. C." diagrammatically illustrate respectively the intestinal nerve center and the genito-spinal center, as they exist within the spinal cord. Natural impulses arising from the sigmoid flexure are transmitted to the special sympathetical ganglion, and from there to the I.C.S. center in the spine. Impulses arising from the prostate or genital organs are directed to the prostatic ganglion, thence to the G.S.C. or genito-spinal center. Should cognizance be taken of such an impulse, it is transmitted up through the sensory tracts "S. E." as the arrows indicates, to "O. T." the optic thalamus, or sensory nerve center. Should the impulse not be noticed it stops there, but on the contrary should cognizance be taken of it, it is transmitted from "O. T." to "R. C.," the reasoning center of the brain, and should further notice be taken of it, it is transmitted from "R. C." to "I. C." the idealization center of the brain, by which it is reasoned about or seriously considered. If further action is taken it is transmitted from "I. C." to "C. S." the motor center, and down through the motor tract from "C. S." to the organ or muscle immediately concerned, by which action, as determined, is taken.

There often arises lesion of the sigmoid-flexure or of the rectum, when reflex irritation is transmitted to the ganglia controlling these organs, thence to the "I. S. C." or spinal center controlling these organs indirectly; the continuous reflex irritation arising from the ganglia is transmitted to the spinal center " I. S. C.," until finally there ensues effusion, abnormal congestion and stasis of this spinal center. Paraplegia may result from this,

although at a point somewhat higher than the "G. S. C." which would be extended in a similar way to that of an involvement of the "G. S. C." and as a result there would be paralysis of the lower limbs, impaired function of at first, one arm, then disturbed memory, and general conditions similar to those that follow that of the "G. S. C."

One peculiarity clinically observed in some cases, where there existed an involvement of the prostate and disturbance of the genital organs, was a peculiar complication between a lesion of the sigmoid-flexure and the "I. S. C." of the cord; which has proven, more from a clinical point of view than from any other, that the "G. S. C." and the "I. S. C." are in close relation. This special disturbance referred to was manifested by excessive and unnatural priapism. This condition has been observed not in a few cases only; many cases of the kind have convinced the writer that these centers are closely related in the spinal cord, as cure of the sigmoid has relieved the priapism.

Figure XI (G) represents the prostatic ganglion, and nerves passing to (P. P. P.) prostate, and to the two nerves passing to the spinal nerves (b and d); (v), seminal vesicles; (R), rectum; (c), genito-spinal center; (b), nerves running from (a) ulcer; to (c) genito-spinal center; (d) nerve reflected from G. S. C. (c) to rectum, vesicles, bladder, etc., which transmit nervous irritation (arising primarily from the lesion in the prostate gland) and cause various morbific states, as impotency, paraparesis, paraplegia, etc. These conditions are common as results of lesion of the prostatic urethra, of the prostate itself, or of the neck of the bladder.

The urethra, prostate and adnexa, which include the

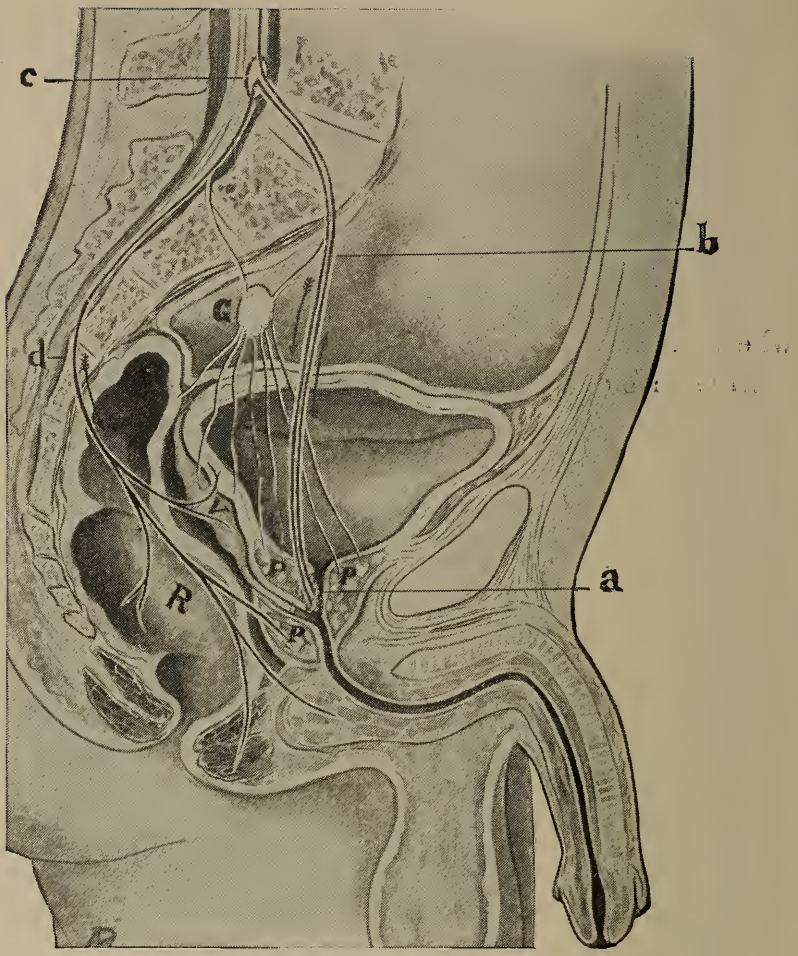

FIGURE XI.

rectum, bladder, and vesicles, primarily, and the diaphragm, kidneys, lungs, heart, etc., secondarily, are the organs that are involved in morbific changes more frequently than are any other in the entire human system. All the vegetative organs are in close proximity, and their functions are mutually interdependent and cannot be disassociated. In other words, lesion affecting any one of these organs invariably brings about either functional disturbance, or ultimate lesion, of other organs,

sometimes located far therefrom. The vaso-motor system always becomes affected, and naturally is associated with disturbances of the heart and general circulation. By noting the immense distribution of the sympathetic nerves arising from the various ganglia to these organs, we can at once see how a disturbance in any one organ brings about involvement of the others.

Lesion of any organ in the pelvic cavity may be transmitted to its ganglion, and thence reflected to the spinal center, causing first congestion, stasis, and often effusion at this particular point. It may then give rise to softening or degeneration of this spinal center, or result in the formation of a cicatrix, which would leave a permanent lesion and probably permanent paralysis of the spine.

By way of practical illustration we will suppose (as frequently happens), that one has a lesion or an abrasion, either within the prostate, at the neck of the bladder, or within the rectum—there arises a constant excitation of the ganglion controlling the prostate, the bladder, or the rectum. This ganglion transmits its impulse uninterruptedly as arising from this sore to the spinal cord at (c) (Figure XI). This genito-spinal center becomes first congested normally, then congested abnormally, and as a result there is an effusion of fluid, in and around the spinal cord, at this center, (c). This causes either impaired motion from the hips down, or a sudden paralysis of the lower extremities. Should relief of this sore at the prostate take place by proper treatment, bringing about abatement of the congestive irritation of the ganglion "G," then the fluid around the spinal center at (c) would become absorbed before lesion took place in the spinal cord, and restoration to perfect health would ensue. But should no relief to this sore

take place, and there is continuation of the same reflex irritation, this center would become permanently congested, or statis would take place, and ultimately hemorrhage occur, cicatrix form, and permanent lesion would result. At this final period, should relief of the gland not take place, there never could be a perfect restoration of normal conditions to the spine, because this cicatrix or scar tissue would have become hard and firm, and adhere to the spinal membranes; and little or no benefit could result from treatment thereafter. The spine would gradually become involved above the lesion at (c) and ultimately the loss of the arms (generally the left at first), then impaired memory, and finally a lingering death.

As the "ganglionic brain" or sympathetic nervous system exerts special influence over the various organs in health and in disease, and becomes reciprocally involved in all their various conditions, brief reference will be made here to the functions of the two different nervous systems found in the human body, that we may be enabled to note the pathologic conditions, as well as the functional relations of these two important nervous systems, separately, and in their relations toward each other. The brain (cerebrum) and spinal cord, or the cerebro-spinal nervous system, only controls those organs which are under the direct influence of volition, or will; while the ganglionic controls all the vegetative organs. That is, one can, by the exercise of his will, command the arm to bend or the limbs to move; but he cannot command the stomach, the prostate, and similar organs to act.

While there is no direct connection between the cerebro-spinal nervous system and the ganglionic nervous system, yet the nerves of one are so intimately blended

with those of the other, and the sympathetic ganglia and cerebro-spinal centers are so intimately related, that lesion of any organ which is controlled by one nervous system, is indirectly influenced by, and influences the other. All the organs of the body, which are directly concerned with the maintenance of life, are controlled by the sympathetic ganglia. These ganglia are aroused to activity only by intrinsic or extrinsic excitation. By way of illustration, suppose the vesicles ("v" Figure XI) become filled with semen. This fact is not transmitted directly to the cerebrum, or brain, but to the prostatic ganglia (G) (the sexual brain); thence directly to the prostate gland (P.P.P.) where sensual emotions arise. If further notice be taken of this impulse, it is transmitted to the genito-spinal center (c) of the spinal cord, thence up the spinal cord to the brain, or cerebrum.

Again, suppose there is a lesion, such as a py-ro-sak, and transmission of the irritation thereby set up, to the fourth sacral ganglion; from here the sensation is conveyed to the hypogastric ganglion and finally to the spinal center controlling this particular organ—in this event, instead of normal conditions prevailing, there arises a continuous nervous excitement, produced by this lesion, which is transmitted to the spinal center and up through the sensory tract to the receptive and idealization centers of the brain. There then ensues a persistent irritation of these latter centers, causing insomnia or a restless nervous state which is at times unbearable, when there should be perfect rest and quietude. The sufferer arises in the morning feeling "all used up" and as if he had not been to bed at all. Or this may so affect the hypogastric or epigastric plexus, as to bring about a nervous disturbance resulting in indigestion where either an acid or an alkaline excess

produces acid eructations or gaseous formations. These conditions, which are merely symptomatic, as a rule are not treated, as one would naturally think they would be, by first ascertaining their cause and then taking steps to remedy these, but repeated doses of bicarbonate of soda or some other alkali are prescribed, the effect of which is to fill the body with alkaline deposits. The ineffective efforts of nature to eliminate these deposits when they have become too great to be thoroughly dissolved in the bodily fluids, results in their precipitation and deposition in the blood vessels (rendering these hard and brittle), pelvis of the kidney, gall bladder (in which two latter they cause calculi to form), the skin, and the various tissues which Nature has provided for their elimination from the system.

There are other instances where lesion of the prostatic urethra affects certain ganglia, which effect is transmitted to the vaso-motor center, and as a result there is an excessive alkaline urine accompanied by nervous disturbances. This alkaline constituent of the urine often becomes so excessive as to accumulate, and is deposited within the various tissues.

On the other hand, there may be a lesion in close proximity to that giving rise to excessive alkalinity of the blood that will give rise to disturbance of a special ganglion, which in turn so disturbs the vaso-motor system as to cause acetonaemia or an acid condition of the blood, which is accompanied by a retinue of acid secretions and especially of the urine, which condition is termed "uric acid diathesis" and is dosed for indefinitely, without effort being made to remove the cause.

This acid condition gives rise to morbid conditions of all the serous membranes within the body. The membranes which first become involved, as a general rule,

are the synovial of the joints, causing what is termed "rheumatism"; then follows in direct line, the serous membranes of the heart, which often causes serious disturbances of that organ, and especially of its mitral valves; often the cavities of the heart also become involved. Laymen, as well as physicians, know that heart disease is somehow connected with rheumatism, and most of them think that rheumatism causes heart trouble. There is no connection between rheumatism (or synovitis) and heart disease; but the same condition (that of acetonaemia) that gives rise to rheumatism or synovitis causes also the serous membrane of the heart to become affected, as heretofore described, giving rise to endocarditis; then the serous membrane enveloping the lungs by way of the pleural sac becomes affected and gives rise to an irritative cough that is mistaken for tuberculosis, bronchitis, and various other lung troubles. It is often the case that men and women suffer for years with such a cough, frequently unattended (at first at least) with any expectoration, that arises simply from irritation of this pleural sac. Relief of the local trouble entirely dissipates the cough.

In some instances, the disturbance of the ganglion that has given rise to an excessive alkaline urine often also affects certain nerves, and especially those of the origin of the sciatic nerve; and strangely enough this disturbance is transmitted down the sciatic nerve to the heel. In other instances, it is transmitted to the big toe only; then again to the second or third toe, when there is no other symptom pointing to lesion of the gland, other than this one symptom. There have been cases treated by the writer, where complaint was made of no symptom other than pain in the heel, pain in calf of leg, pain in big toe, or pain in the popliteal space. Often the patients would

insist that they had no trouble with the bladder, with the prostate, or any of the genito-urinary organs.

Case I. The patient for some time refused to have an examination made. When he did consent, on being questioned, he acknowledged having had gonorrhea several times. His prostate was exceedingly inflamed—and although three or four treatments gave great relief, he insisted on leaving for Hot Springs, Ark., "where he had procured instant relief several times before." The Hot Springs treatment on this occasion, however, aggravated his condition, the pain in the big toe becoming so excruciating, that he had the toe removed. The pain at once jumping to his ankle, the foot was removed; the pain went to the calf of the leg, and became so intense, that hypodermic injections of large doses of morphia failed to give relief. He then insisted upon removal of the leg at that point, which was accomplished under general anaesthetics, when the pain became located in his knee and was unbearable. Relief could not be procured except under the influence of chloroform; and the patient insisted upon the knee being cut off. He was so weak by this time, that the operation was performed without an anaesthetic, when he stated that the removal of the leg was attended with less pain than that which he had suffered before. He died a few hours after this operation. A second case of this kind occurred to the knowledge of the writer, where a man had suffered intense pain in his toe for two or three years. He consulted several neurologists in succession, none of whom could give any but temporary relief. He finally went to one whose theory was that there was too much blood in the toe; and so impressed the man, that he agreed to wait six weeks with his foot elevated above his body, to favor the return flow of blood. This was accompanied

by pain as severe at the end as it was in the beginning. Added to this was almost completely broken health. At this time he consulted the writer, when relief of the prostate completely cured his toe in less than six weeks.

The writer has doubtless appeared to be very redundant in giving so many illustrations of the interaction of the ganglionic-nervous system, but there are so many symptoms arising from causes and lesions remote from the apparent seat of disturbance that he wishes to emphasize the fact that one must be familiar with the action of all the different ganglia and their relations with each other in order to form a correct diagnosis—and the chief aim of diagnosis, is, after all, to discover the cause of disease. Observations in cases of hay fever, sciatica, difficulty of breathing, chronic cough, shortness of breath, insomnia, neurasthenia and various other troubles of similar character, for example, have invariably shown that they could be traced to such lesions and other causes remotely situated; and the removal of the cause has so invariably resulted in relief of these ailments that we cannot ignore the numberless facts that day after day clinically prove the close connection existing between the lesion and its observed effect.

When the causes have been located and removed, there is but little left for the physician to do in the way of curing his patient.

TOXIC SOURCES OF DISEASE AND PREMATURE SENILITY.

There are four channels through which the ashes or catabolic products are eliminated from the body: namely, the lungs, the skin, the bowels, and kidneys. The former two are of little importance from a pathological point of view, as the carbon-dioxide and salts eliminated by the lungs and skin are practically harmless.

The author is a strong believer in the germ theory, and, in fact, knows that it has done much toward clearing up many obscure diagnoses. Physicians are often misled by taking cause for effect, unaware of all the conditions pre-requisite for the development and propagation of germs.

All bacteria, or germs, whether of vegetative or of animal origin, may be compared to an ordinary germ, cell, or seed. There are three conditions absolutely essential for their development. These three conditions are: first, heat; second, moisture, and third, food (soil or culture).

Heat and moisture are always present in the blood. The other necessary condition (food for the bacteria) is obtained especially from the damming up of toxic matter at the neck of the bladder, and also from the obstruction of similar matter in the bowel (resulting from disease of the sigmoid), from pus sacs, overticula, pelvis of the kidney, etc.

These toxic products contain practically all the proteids or albuminoid substances which are among the most virulent of all poisonous materials, and they are constantly being absorbed into the circulation. They thus help to maintain the blood in a condition suitable for the development and propagation of toxins, toxalbumins, auto-intoxication, etc.

In the absence of the toxic food necessary to the production and sustenance of bacteria, the germs of pneumonia or of any other acute or infectious disease which have passed into the blood by way of the lungs or any other route would necessarily perish and there would be no such disease develop.

By way of illustration of the development of bacteria, or vegetative germs, suppose a seed, or grain of wheat

is subjected to the proper amount of moisture, and to a temperature of from 70 to 90 (F.) degrees; placed upon a stone or rock, it will sprout, but never develop. But under similar conditions of moisture and heat, if placed in a fertile soil, it will germinate, propagate, and produce its kind. The same is true of any other vegetable or animal microbe.

WHAT WE READ IN THE PAPERS.

The following appeared in a recent issue of the Chicago Tribune in the "Medical Advice Column":

> Mrs. North Side writes: "I have read nothing in your articles relating to my kind of indigestion—that is, acidity after eating ordinary food, belching of gas, etc. I have cut out coffee at intervals, substituting tea, but cannot detect much difference, if any, in my symptoms. I eat toasted bran or whole wheat a day or two old, and keep my bowels open by taking a teaspoonful of Carlsbad salts every morning. I do lots of exercising, but not in the open air. What can I do beyond avoiding rich food? And what do you think about having my stomach washed out every day? I am 40 years old and have been bothered this way for years, but more so since having my appendix removed three years ago."
>
> REPLY.—You probably have a nervous indigestion, which dieting, washing the stomach, and similar procedures generally hurt about as much as they help. The best cure of all is the service of a stomach specialist with personality. A negative minded, scientific stomach specialist who analyzes and talks chemistry is as useless as a bump on a log. A stomach specialist, to help his patients, uses per-

sonality, plus. Nervous indigestion, acid stomach, needs a specialist who leads the mind away from the stomach. The next best aim is to cure the constipation, which is practically always present. When this can be done by bran, vegetables and agar, to use them is better than to use Carlsbad salts. Frequently, dyspeptics, in trying to avoid this, that, or the other food, eat so as to bring about constipation and thus they promote dyspepsia indirectly. It is better to eat with more freedom and less thought. The next best aid is exercise in the open air.

Here is a prominent physician directing a woman who evidently has a special lesion to take treatment from a specialist of personality, *plus,* for an indefinite period. Bran acts only by local irritation; and if there is, as is most probably the case, ulceration of the sigmoid or rectum the bran aggravates the irritated ulcer, and the disease constantly grows worse, until finally the patient dies during a paroxysm of acute indigestion, superinduced by the bran or perhaps one of the various prepared foods which has been prescribed by the attending physician, although most of these prepared foods are known to be deprived of nearly all the nutritive components in the process of manufacture, and otherwise doctored. I do not think there is any doubt that "prepared foods" and the poisonous substances which are added to make them attractive to taste are responsible for many of the disturbances of the digestive tract or entire alimentary canal.

It is quite common for physicians to advise removal of the appendix for the relief not only of nervous indigestion, but of every form of obscure disease; yet the writer confidently affirms that he has not ever seen a single case of removal of the appendix where the indi-

vidual was sound or healthy thereafter. Often have I learned of people who have been rendered much worse by the operation in question. I shall make the bold statement, that during the last fifteen years I have had numerous cases of "appendicitis" traceable to other lesions, and that not one failed to be entirely cured on removal of the cause. I believe, too, that ninety-nine per cent of cases suffering with typhlitis and other disturbances of the colon and bowels can be cured by the same process of treatment.

There is another point which I cannot forbear mentioning in connection with prepared foods and the poisonous substances which are often added to every-day foods, and that is the addition of formalin to milk. That this is one of the most potent factors of serious results has been clinically proven many times by the writer. Long continued use of formalin, even in minute doses, causes an acid condition of blood with all its retinue of injurious effects by way of inflammation of serous membranes, bringing about articular synovitis, endocarditis, pleuritis and various other troubles of organs containing serous membrane. Milk and other foods containing formalin and other injurious drugs are given to young infants and cause early breakdown of their vital organs, so impairing their health before reaching maturity as to render them incapable of resisting the various pathological influences that arise in later life. So positive am I of the deleterious effects of formalin that I never use it personally, not even in my coffee. Even when prescribed by a physician it is often contra-indicated; and when it *is* indicated it should never be given more than three or four days in succession.

The following excerpt from the Pennsylvania Journal of Feb. 2, 1913, is worth reading in this connection:

"Sixteen boys, all stricken with appendicitis at about the same time, operated upon within a few hours of one another, and all the patients holding a reception at the same time today is the unique record of St. Mary's Hospital here (Philadelphia).

"The boys, ranging in age from 10 to 16 years, were inmates of St. Francis Industrial Home, a few miles outside of Eddington. Ten days ago the youngsters began to complain of pain in that portion of the anatomy where the appendix should be.

"The resident physician of the home diagnosed the cases as appendicitis, and began to rush the patients to St. Mary's Hospital here. At St. Mary's, Dr. S. D. K., the resident physician, also diagnosed the cases as appendicitis. Dr. E. K. did likewise.

"After the sixteen boys became hospital patients their condition became worse. It was decided that operations were necessary to save the lives of the boys. That was six days ago.

"Dr. K. and Dr. K. rolled up their sleeves and started in. As soon as one youngster was removed from the operating table, another took his place.

"Dr. K. and Dr. K. declared that epidemic appendicitis was brought on through overeating of cheese."

Drs. K. and K. surely had here fine opportunity to practice their art; but this maiming of sixteen young boys should be requited by condign punishment upon the offending doctors. We are getting more enlightened every day; and some of the Western states are even now considering the advisability of interdicting the operation altogether and providing a severe penalty on anyone who performs such a barbarous and unnecessary operation.

Another instance of the insane craze for the removal of the appendix was reported in the Chicago newspapers of Aug. 23, 1913, as follows:

> "Robert Scerzino, 11 months old, 2614 W. Huron street, was operated upon at the American hospital last evening for appendicitis by Dr. M. T. and was assisted by Dr. M. F. The child is the youngest person ever operated upon for the disease, according to medical authorities."

DIAGNOSIS.

Diagnosis is recognized as perhaps the most important and most difficult of the medical branches. Even so eminent a diagnostician as Dr. Abbot publicly declared that only about 50 per cent. of his own diagnoses were corroborated by the autopsies held afterwards, although these cases included some which "a tyro in medicine would record at a glance."

Some of the most difficult ailments with which the profession has to deal are those of so-called neurasthenia, nervous indigestion and various other forms of nervous disturbances manifested as insomnia, melancholy, defective memory and different forms of sensations arising in the back of the neck, top of the head down the limbs to the fingers, toes or heel, disturbed vision, ringing in ears, tingling of fingers, paresis of the arm or lower limb, sciatica as manifested by darting pains in the limbs, especially in the popliteal space and calf of the leg, etc. Many cases have come to the writer with similar symptoms to those above enumerated and he has succeeded in clearly tracing them to lesions of various organs, as explained.

In summing up, I wish to state that I am prepared to prove by clinical demonstration, every statement made

in these pages regarding the cause, diagnosis and cure of the different diseases mentioned in the preceding and following pages.

The main features in diagnosis in the great majority of cases are more thoroughly elucidated in the clinical reports that follow, than they could be in any other way, as the tracing of symptoms to their sources in the different lesions will enable us to more clearly understand the main diagnostic points, and the means of relieving them, than by means of a dissertation upon Diagnosis itself.

THE OSTEOPATHS.

Certain "wonderful cures" produced by "distinguished physicians" have sometimes been brought to the notice of the writer, when in fact the physicians in question were guilty of doing nothing more than manipulating the spine or the abdomen, whereby they relieved certain symptoms, but did not remove the cause which had produced these various disturbances. A number of cases treated by myself had previously passed through the hands of some one or other of these "chiropathic" physicians—one of the most noted of whom was a few months ago discharged from his position as brakeman on a railroad. After being discharged he studied chiropathy, obtained his diploma and is now practicing as a full-fledged physician—all this in a few months.

The osteopaths reap their harvest by manipulations of the spine; whereby they reach, in a measure, the double chain of ganglia which extends through the pelvic, abdominal and thoracic cavities; by their manipulations they also give temporary relief to the great abdominal brain, constituting the semi-lunar ganglion, or solar plexus. The various lesions which have been noted by the writer, give rise to disturbances in these various

ganglia; and although the osteopaths often give temporary relief only, it most frequently happens that the patients are more than satisfied with the really unsatisfactory results, and continue to spend their hard-earned money in preference to having their stomachs dosed year after year with poisonous coal-tar preparations and other medicaments equally as destructive to the blood corpuscles, until they become almost bloodless or, as often happens, die without knowing what their trouble was.

A prominent physician of Chicago, living in one of the most aristocratic parts of the city, called upon the writer, delivering samples of medicines for a prominent drug manufacturer. I asked him if he was practising medicine. He reluctantly replied that he was; and in an injured tone stated that he was necessitated to accept a position with this drug house to deliver these samples the first of every month in order to assist him in making a living. He further stated that four-fifths of the people in his vicinity were Christian Scientists. I asked him if he had any cases of acute indigestion, and how he treated them. He replied affirmatively, and said that he gave "lactopeptin" and various digestive preparations. I said, "Doctor, do you ever make a physical examination to note the cause of the trouble?" "Oh, no!" I made the same inquiry regrading prostatic troubles, cystitis, pyelitis, etc. The same reply was given; that he would write prescriptions without making any physical examination. I then said to him: "Can you censure these people for not permitting you to dose them, from day to day, month to month, and year after year, without knowing the real cause? Is it not much better to depend upon Christian Science than to take remedies of that kind, which ultimately would bring about serious

trouble?'' He left feeling quite indignant at my impertinence! I mention this case especially, as coming under my own observation; and it really illustrates the conduct and tactics of medical practitioners of today.

CHAPTER II.

Brief Outline of Anatomy and Function, as Pertains to Our Subject.

Of the various classes of diseases from which men suffer, none is of more frequent occurrence, none has more baffled the skill of the physician, or tried the patience of the sufferer, than that of the prostate and adjacent organs. The frequency with which this gland is affected has been variously estimated by genito-urinary specialists; some holding that from twenty-five to fifty per cent. of men suffer from its disease, others claiming that it is an exception to find a man past forty with a healthy prostate gland.

When we note the highly sensitive organization of the gland, its psycho-sexual relation, its exposed position to the bladder, rectum, kidney, and seminal vesicles, and the fact that it is pierced by the urethra, the prostatic and the ejaculatory ducts, and that, moreover, it is frequently subject to excessive tax or abuse, we cannot wonder at the frequent functional disturbances or organic diseases incident thereto, the various nervous disturbances arising therefrom, and, owing to its inaccessibility, the obstacles to be overcome in its treatment.

The prostate is a musculo-glandular organ enveloped in a fibrous capsule. It is situated at and embraces the neck of the bladder. It is about the size and shape of a horse chestnut, with its base directed towards the bladder and its apex in front. It lies upon the rectum,

being separated therefrom only by loose fascia. Its transverse diameter at the base measures about one and one-half inches, its antero-posterior diameter (which corresponds with the length of the prostatic urethra) is about one and one-quarter inches, and its depth three-quarters of an inch.

It consists of two lateral lobes of equal size. Some writers mention a third or middle lobe, but this exists only with true indurated hypertrophy and then as a pathological condition. The urethra passes through the anterior third of the gland, though occasionally through the middle or posterior third.

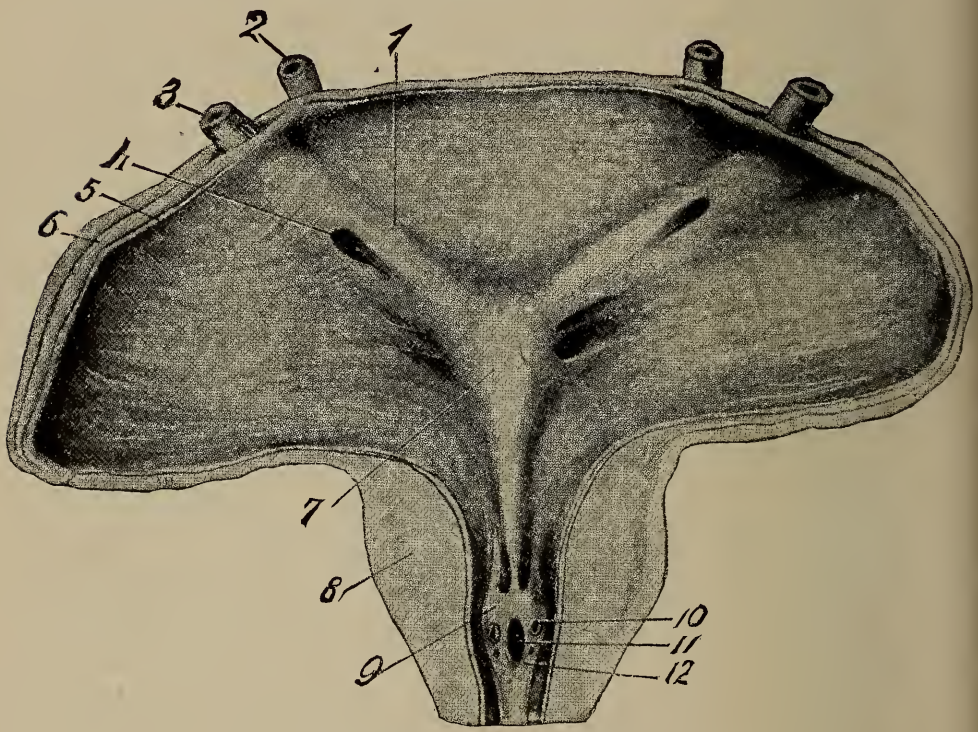

FIGURE XII (Henle).

Figure XII shows the relation of the prostate to the bladder and prostatic urethra. The floor of the latter is

a very complicated and highly sensitive structure and bears an important relation to the gland, both from a functional and pathological viewpoint. In fact, it is really a part of the prostate itself.

In the center and longitudinal direction of the floor is a small eminence (9), the verumontanum, or caput gallinaginis. Somewhat in front and in the middle of this eminence is a small cavity, the utricle (11). Special attention is called to this little cavity, as it often becomes enlarged and is then apt to engage the end of a small bougie, catheter, or other instrument while being used. On attempting to pass such an instrument into the bladder, it may become arrested, and so cause one to make an erroneous diagnosis. Force should never be used with any instrument, or false passages may be made. On each side there is a slight fossa, into which the ejaculatory (10) and prostatic (12) ducts open. (3) points to the ureter which passes down from the kidneys and enters the bladder upon its posterior wall, passing through it in an oblique direction and beneath the mucous lining of the bladder; which mucous lining serves as a valve to prevent regurgitation of urine back into the ureter when the bladder is filled and distended. The urine percolates down beneath this mucous surface into the bladder even when it is full.

The floor of the prostatic urethra is the most sensitive part of the entire genito-urinary tract and is considered the seat of the sexual orgasm. It is subject to pathological lesion more than any other portion of the urethral canal, owing to its complex structure, and to the fact that it receives the irritative secretions of the prostate and seminal vesicles, when these latter organs are affected. It is, in fact, an index of no little importance to the condition of the prostate.

The orifices of the ejaculatory ducts or utricle often become dilated when disease of the prostate or vesicles exists, and are apt to engage the point of a small instrument, in an effort to force an entrance into the bladder, and becomes arrested, when a larger instrument will pass over these orifices and enter the bladder with ease.

Beneath the fibrous capsule of the prostate is a firm band of unstriped muscular fibers surrounding the base of the organ and deflected downwards towards the apex. The same fibers radiate throughout the gland in the form of trabeculæ, forming meshes, through which the vessels and nerves ramify. Interposed between these meshes there are also numerous follicles that secrete a milky, alkaline fluid, which passes out through the prostatic ducts upon the floor of the urethra. The main function of this prostatic fluid is to maintain alive the germs or spermatozoids until they reach their destination. When the gland becomes inflamed or diseased, this fluid naturally becomes inert and useless; or serves to destroy these germs by its septic condition, and thus renders them infertile. I have often noticed by clinical observation that men apparently healthy are sterile, which occurs oftener than defect in the opposite sex.

The arteries are derived from the internal pudic, vesicular and hemorrhoidal, which are branches of the internal iliac.

The veins form plexuses around the base and sides of the prostate, bladder and rectum, communicating freely with the hemorrhoidal and spermatic veins, and the dorsal vein of the penis and pampiniform plexus. Thus the organs from which they arise, namely, the rectum, spermatic cord, epididymis and penis, are brought into close physiological and pathological relations with the prostate. Passive congestion or stasis of the veins of the

latter cause a clogging of the veins of the rectum resulting in ulceration or hemorrhoids; or, when the spermatic veins are involved, varicocele follows.

NERVES.

The nerves supplying the prostate are very numerous and highly sensitive. Those derived from the sympathetic system are supplied by the prostatic ganglion, and the hypogastric and pelvic plexuses, as illustrated in Figure VII.

FUNCTION.

The prostate is an important genital organ, possessing the triple function: a, of expulsion of semen by means of the rhythmical contraction of its muscular fibers; b, of being the nerve center of the orgasm; c, of secreting, through its glandular structure, a fluid essential as a vitalizing agent to the spermatic germs.

It is in this gland that the pleasurable sensation of the orgasm is located; the sensation being synchronous with the expulsion of semen. It is by this gland that the physiological impulse to gratify animal nature is indirectly exerted through the sympathetic and cerebro-spinal nerve centers. In fact, the gland has been appropriately called the seat of the sexual brain. The intimate reciprocal relations of the cerebro-spinal centers and the prostate are very marked, both in health and disease.

In health, excessive mental exertion, as by close study or business cares, will lessen the sexual appetite; while violent emotions, as grief, fright or anxiety, will temporarily suspend all desire.

Men are by nature much more sensually inclined than women; and when they cultivate libidinous impulses.

and associate with prostitutes, are liable to indulge their sexual propensities to such an extent as to develop passions that may lead to grave moral vices, like excessive intercourse or masturbation, resulting in lesions of the prostate, or adjacent organ, or indirectly to some serious form of nervous disease.

Just as mental disturbances influence sexual conditions, so in like manner do diseases of the prostate gland cause such various forms of mental disorders as inactivity, depression and numerous other neurotic aberrations.

I have especially noticed that men between the ages of forty and seventy, suffering from chronic prostatitis mentally become sluggish and inactive.

Owing to the contiguous relations, the direct source of blood supply, and the intimate connection of the nerves of the prostate, bladder, seminal vesicles and rectum, disease of the prostate cannot exist any great length of time without causing either functional disturbance or organic disease of the others. Besides, inflammatory disease of the prostate often arises from chronic rectal troubles.

CHAPTER III.

Acute Prostatitis.

This form of disease of the gland usually results from harsh treatment of gonorrhea, by means of strong injections, large doses of copaiba, turpentine or cantharides, or from injudicious use of instruments and methods of treatment. It frequently follows injudicious treatment of chronic diseases. In fact, acute troubles often supervene upon chronic inflammation of the prostate or bladder, even when the greatest care is exercised in the treatment. However, this will be more fully explained in subsequent chapters. The gland swells very rapidly and is extremely painful. The inflammatory condition usually extends to the seminal vesicles, bladder, and often the entire pelvic viscera, giving rise to marked pain in the region of the perineum, rectum and groins.

Dysuria is excessive and is often attended with incessant tenesmus. The attack is usually ushered in with a chill, which is followed by mild pyrexia. The desire to void urine is frequent and uncontrollable, the patient passing but a small quantity at a time. The irritation often extends to the rectum and bladder, giving rise to a sensation of fullness, a desire to remain at stool and incessant desire to void urine. The latter symptoms are especially prominent when vesiculitis exists. Orchitis often supervenes, greatly adding to the discomfort of the patient. On the appearance of the first symptoms of the latter trouble, the patient should be placed in bed at once and remain there for several days or he

is liable to be confined to bed for several weeks or even months. It is the only treatment in such cases to avoid a long, continued, painful sequel.

Treatment.—The treatment consists mainly in palliative measures, by way of rest in bed, anodynes in the form of hyoscyamus, opiates and hot hip baths. The diet should be light and consist mostly of demulcents, as of barley water, which is especially indicated; soups and other light nourishment. All injections or specific medication should be discontinued.

Urethral instrumentation is strictly interdicted, unless there are indications of retention of urine. Should it be necessary to evacuate the bladder by catheter, which is seldom the case, a full dose of morphia should be administered half an hour previously thereto, per the rectum. Rectal suppositories of boric acid, belladonna and opium give great relief. The bowels should be maintained in a laxed condition by means of saline cathartics.

In from five to fifteen days the urethral discharge is re-established, unless complicated with orchitis, and generally becomes quite profuse. This is followed by defervescence and the subsidence of all acute symptoms. At this stage I advise the free use of a five per cent. solution verbascol in distilled water, to be injected deeply into the urethra, from four to five times daily, with an ordinary sized gonorrheal syringe having a blunt point. I never advise a long nozzled syringe, as it often serves to perpetuate urethritis near the meatus. This treatment readily relieves all acute symptoms.

Should the discharge continue excessively and longer than a week, after the subsidence of acute symptoms, I add one grain of sulpho-carbolate of zinc to the ounce of distilled water or the injection before mentioned.

When complicated by orchitis, rest in bed is imperative. Local applications of belladonna and hamamelis with cold applications to the swollen testicle give relief. Never under any circumstances paint the scrotum with iodine or any other irritating substance, as this only serves to increase the inflammation. I also deprecate the use of bandages to prevent swelling, as this latter is nature's effort to relieve the soreness and tenderness. Anodynes should be the chief remedies given internally.

All acute symptoms gradually subside under this treatment, leaving a chronic gleety discharge, which is a "flag" to indicate chronic inflammation of the prostate or vesicles, and will be considered in the succeeding chapter.

CHAPTER IV.

Sub-acute and Chronic Prostatitis, with Granulated Urethritis, Vegetative Growths, Proud Flesh, Cystitis, Vesiculitis.

This affection of the gland is one of the most common diseases with which men between the ages of twenty and seventy-five suffer. It is quite difficult to draw a line between sub-acute and chronic diseases of the prostate, as there are conditions and symptoms common to both. A strict boundary line, however, cannot be drawn, with reference to age, in any class of diseases of the prostate. There are occasionally cases of chronic prostatitis that occur earlier than the twentieth year, while others are met with even past seventy-five without there being any perceptible enlargement of the gland.

Figure XIII illustrates the most common form of the beginning of acute prostatitis, as well as of sub-acute or chronic prostatitis. The red part indicates the site of the lesion.

In the earlier stages of the trouble (the sub-acute) the inflammatory condition is confined to the ducts and follicles of the gland; but when of long standing it becomes diffused and involves the parenchyma of the entire organ. Ordinarily there is little or no swelling of the prostate in the early stages of this disease. The bladder, seminal vesicles and rectum are rarely involved in a sub-acute stage; in the chronic stage, however, these organs are usually involved. In some aggravated

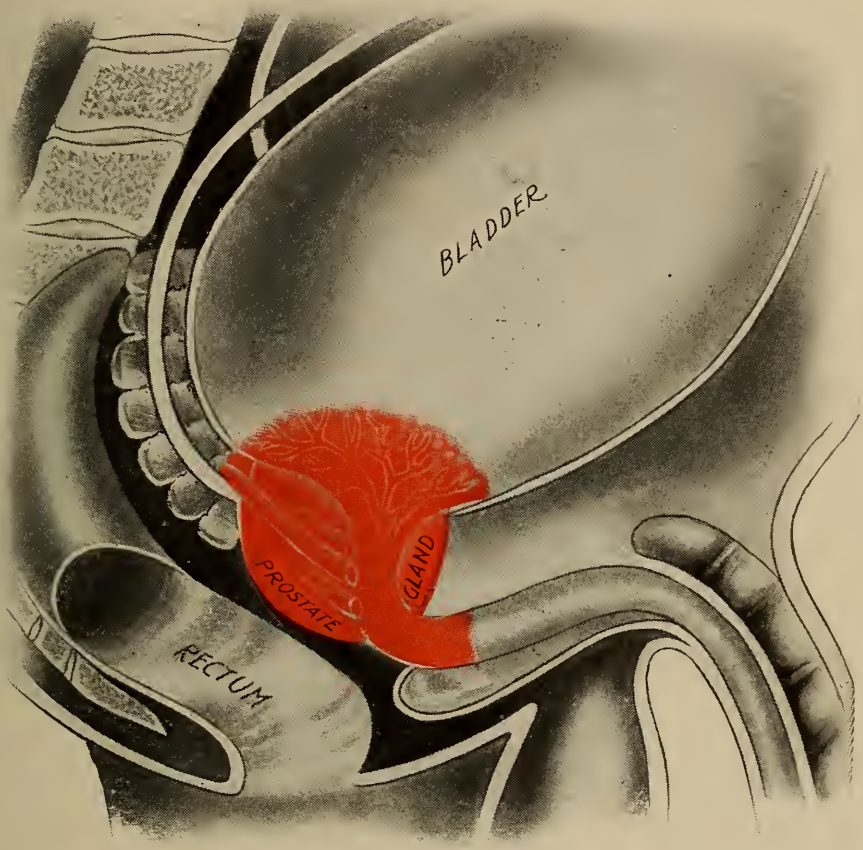

FIGURE XIII.

cases of both forms, the inflammation extends to the vesicles, ampulla, vas deferens, epididymis or the globus major and minor. When the latter are affected small worm-like lumps can be felt at each end of the testicles, which are then usually tender to the touch.

Congestion of the pampiniform and hemorrhoidal plexuses of veins almost invariably result: the former causing varicocele, especially upon the left side, while the latter gives rise to a swollen condition of the rectal

mucous membrane resulting in protrusion, ulceration or the formation of pile tumors. These conditions are sequels to prostatic inflammation and not idiopathic diseases; and the cause producing them should be remedied before treating the symptoms, or all phases of the disease should be treated at the same time.

Figure XIV illustrates the most common condition resulting from an old chronic case of gonorrhea, or a chronic condition of inflammation of the neck of the bladder, whether due to gonorrhea or other causes. This condition also frequently follows glandular enlargement of the prostate, but does not often follow true hypertrophy. In Figure XIV, P.F. points to where the trouble originates. It shows the beginning of an ulcer or lesion, which culminates in the above condition, causing proud flesh or vegetative growths to form and to fill up completely or in part the canal at the neck of the bladder. This condition is often mistaken for hypertrophy of the prostate. Inflammation often extends up into the bladder as shown by I.N., which points to the enlarged and congested state of the blood vessels. This is one of the most common of all chronic troubles with which old men suffer, and it causes swelling of the prostatic gland, just as an ulcer of long standing upon the finger, the limb, or any other part would cause it to swell. P. illustrates where this gland has become so swollen as to project into the rectum. The membrane surrounding this gland becomes very tense, and the gland feels hard; this causes the disease to be often mistaken for true hypertrophy. It is easily cured by proper means; and it does seem criminal to remove the prostate gland, which is so serious and dangerous an operation. Ninety-five per cent. of the cases can be cured without endangering life, and the organ left in

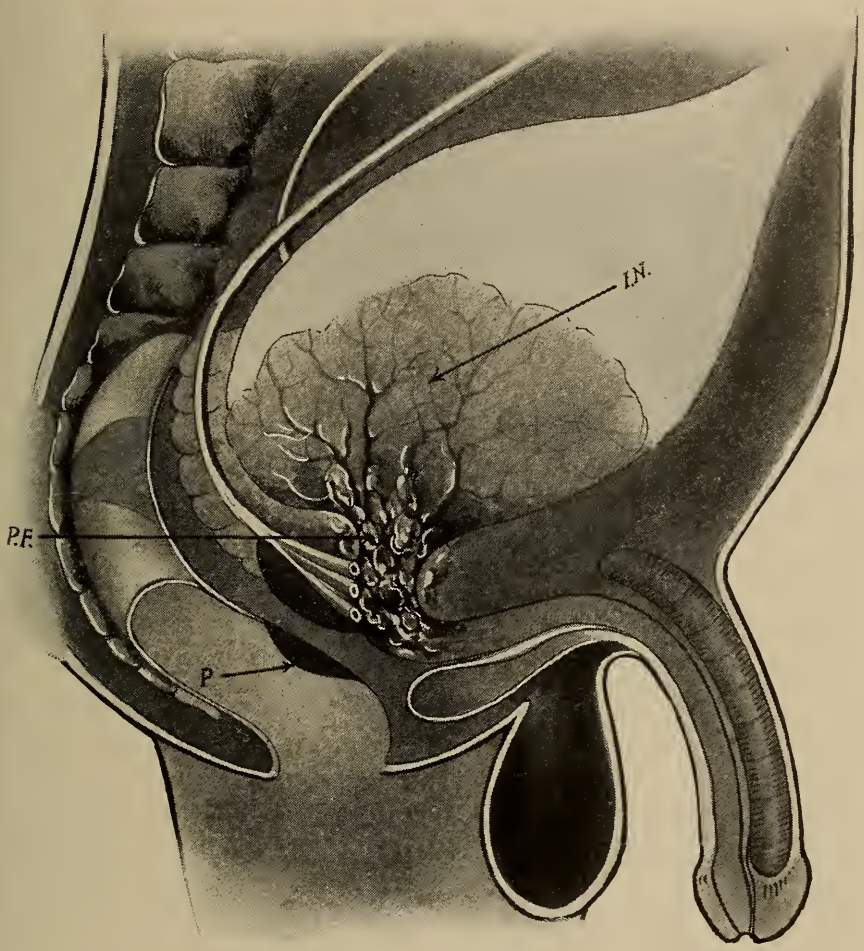

FIGURE XIV.

a normal state, by my methods, whereas the best of surgeons at present cannot present a better average of cures than one-third.

ETIOLOGY.

The most frequent cause of this form of disease of the gland is chronic gonorrhea, but it is not, as many physicians believe, the only one. On a liberal estimate, about seventy-five per cent. of these cases are traceable to

gonorrhea as the source of the trouble, while twenty-five per cent. are due to other causes. Moreover, it is not a fact that the gland becomes affected only by mal-treatment of gonorrhea, as is usually the opinion of the patient, who is often encouraged in this view by rival physicians, as he "goes the rounds." It generally follows treatment even by the most skilled physicians, and, too, in cases where the patient exercises the greatest care. The common opinion of both laymen and physicians is, that a patient suffering from chronic gonorrhea may be declared to be "cured" when the acute symptoms have subsided and the discharge ceased. As a matter of fact, the ordinary method of treatment is by no means an effective one. The prostatic urethra and the prostatic ducts are almost invariably left in a chronic congested and often ulcerated condition, after the cure is supposed to be complete.

These remaining conditions require for their permanent cure the special local treatment devised by the author.

It is this one chronic trouble (prostatic urethritis following acute gonorrhea in men) that authentic reports have proven to be the cause of seventy per cent. of all blindness, and of seventy-five per cent. of all diseases of women. When such serious troubles are entailed by this disease, there should be a law passed which should imperatively insist that all men and women should be entirely cured of this sequel to gonnorrhea before being permitted to marry. This law should be rigorously enforced, although it would temporarily postpone four-fifths of all marriages.

" 'Tis true, 'tis pity; and pity 'tis, 'tis true."

Unfortunately, the writer has to add, that judging from the reports of his patients (and this is corroborated

by others' experience), there are indeed very few physicians in practice who possess the knowledge and the means for properly treating and finally curing the chronic troubles in question.

The condition of the prostatic urethra, described above, resulting from these diseases, leads to the gravest sequelæ in the form of chronic gleet, swelling of the gland, inflammation of the seminal vesicles and the entire retinue of troubles which, it is now considered by physicians, give rise to much more serious trouble than any other one disease, including syphilis.

Prior to the discovery, by Neisser, in 1879, of the specific germ of gonorrhea (which he christened "gonococcus"), the medical profession were very much puzzled as to the cause, tenacity and complications of this disease. Such early authors as Selle (1781), Hunter (1786), Fournier (1806), Ricord (1836), Foucart (1846) and Brandes (1854) claimed that there was a direct relation between gonorrheal urethritis and rheumatism that occurred in conjunction therewith.

Guyon (1836) and Thiry (1856) advanced the theory that gonorrhea developed a latent rheumatic diathesis. Guerin (1846) and Laseque (1876) held that gonorrhea was a disease, *sui generis,* with a long period of incubation. Lewin (1878) advanced the theory that gonorrheal rheumatism was due to reflex irritation from urethritis.

Bernultz and Noeggerrath, long before the discovery of the specific coccus, held that chronic gonorrhea in men was accountable for many of the ailments in women, who never had a true gonorrhea and whose troubles could not be traced to any other source.

The true nature of cause and effect was never clearly understood by any of these great authors; although many of them knew that there was some relation or

connection between gonorrhea and chronic diseases such as synovitis or rheumatism and also with other chronic troubles occurring in women as well as in men. The facts, as we now know and understand them, are that the sequelæ of gonorrhea are due to the passing of these gonorrheal germs (gonococci) into the prostate gland, through the prostate duct, and through the ejaculatory duct into the seminal vesicles, causing these organs to become involved, and greatly complicating the ultimate cure. It is due to this fact that the author insists upon the last stage of gonorrhea being cured, so as to stop the germs at this point, instead of permitting them to invade the prostate gland through its ducts, and the seminal vesicles through the ejaculatory ducts. When they get into these organs they are practically immune to the ordinary means of cure, and can only be reached by the special agents and methods devised by the writer.

Like most great discoveries, that of Neisser was met with strenuous opposition, until confirmed by the investigations of Bumm, Baumgarten, Finger, and many others in rapid succession.

I shall not discuss here the various means of scientific research leading to the final establishment of the fact, which is now recognized as a proven postulate, that the gonococcus is a facultative micrococcus (schizomycete), found free in the purulent discharge of gonorrhea and within the substance of the pus cells. The latter feature, together with the fact that it does not stain with iodine, are two of its most characteristic diagnostic points. Various diplococci are often present, so closely simulating gonococci that the different methods, as staining, culture growths, etc., have all to be used before a definite differential diagnosis can be established.

The gonococci, in common with most of the other micrococci, are anerobic and thrive only in a neutral or alkaline medium, and at temperature of from 30° to 40° C. They feebly resist an acid medium, and in such have an ephemeral existence. Paradoxical as it may seem, considering the tenacious manner with which this microbe clings to its victim, it is a delicate germ and readily succumbs to the effect of many germicidal agents, when brought in direct contact with them; but the gonococcus is so minute that it conceals itself within the pus cells, subepithelial cells, the lacunæ of Morgagni, Littres glands, the prostate and vesicles, and is out of reach of germicidal remedies as ordinarily used.

Up to the time of the discovery of the gonococcus the remedies in use were directed, mainly in an empirical manner, towards controlling the purulent discharge, it being unknown at that time that the pus cells carted away millions of the gonococci, which were the true source of the disease.

Keersmaecker and Verhoogen (followers of Oberlander) say, "the gonococcus is extremely sensitive to desiccation." * * * "It is hidden in the depths of the tissues and is protected against destructive agents."

The gonococci are first implanted, fostered and propagated at or near the meatus, in a medium and locality most favorable for their development. They multiply very rapidly, work their way along the urethra, and (in spite of all measures to prevent it), to the prostatic part; thence directly into the ejaculatory and prostatic ducts and follicles. The orifices of these ducts being open gateways, though their walls are in apposition, offer no resistance to the passage of the germs into the channels of the prostate and ejaculatory ducts, where they become hidden within the follicles of the gland, and are

thereby protected from destructive agents as applied through the urethra by the usual methods. The course is also an open one to the seminal vesicles and vas deferens, to which they occasionally gain access.

The cylindrical epithelium of the urethral mucous membrane is the normal abode of the gonococci. Here they remain active and aggressive, but after leaving this their indigenous soil for that of the prostatic and ejaculatory ducts, they become lethargic and do not wander very far upon alien ground. Hence they usually do not pass further than the interior of the prostate.

The authoritative estimate of the proportion of all gonorrheal cases where the germs invade the prostatic ducts and follicles, is placed at from seventy-five to eighty-five per cent.; those that invade the vesicles, at from twenty to thirty per cent.; and the vas deferens from ten to fifteen per cent. This is about the proportion as demonstrated by the author's clinical experience, though the late fad of stripping the vesicles would place gonorrheal invasion of the vesicles at a much higher ratio.

It is a positive fact, as proven by various pathologists in their examinations of prostatic expressions, that the prostate is the chief abode of the latent gonococci; authorities differ upon the subject as to whether the germs themselves subsequently penetrate cellular tissue and the walls of blood and lymph vessels; or whether they remain dormant within the prostate secreting toxins, which latter are absorbed by these vessels and carried to remote parts of the body effecting metastasis, as manifested by "rheumatism," synovial arthritis, or neuralgic pains in various parts of the body. Lindeman, Young and others claim that the affection of the

nerves and joints is the result of the gonococci carried to these parts by the blood currents from a lesion localized in the genito-urinary tract. Bumm, Baumgarten, Neisser, Bochart, Gerbardt and Hartley maintain that metastatic diseases of the joints and nerves are the result of mixed gonorrheal infection. Guyon, Janet, Furbringer hold that these diseases follow as a direct result of ptomaine poisoning from the invasion of the gonococci into the tissues. There are others who advocate similar views all tending to the same result.

The author concludes, after summing up the opinions as expressed by the numerous investigators along this line, and recounting his own investigations and clinical experience, that metastasis is the result, in the majority of instances, of the toxins of latent gonococci that originate within the prostate as result of the secretion of the germs; and it is only in those cases where an abrasion of tissue in the genito-urinary tract ensues that the cocci themselves enter the circulation and are carried by the blood currents to remote parts of the body. When the latter occurs and the cocci are deposited within the joints, nerves, etc., they readily die, as it is a proven postulate that they cannot live outside of mucous surface, and the disintegration of their cadavers intensifies local metastasis.

Taking either view, however, the question of vital importance is practically the same; which is, that the germs are concealed within the prostate, vesicles, or urethra, and if the gonococci can be destroyed in these organs, it stops the generation of toxins.

Clinical experience has convinced me that both of these views are correct. However, the metastatic diseases are much more often the result of the toxins se-

creted or produced by the cocci in the prostate and conveyed by the circulation to the various tissues in the body, than to the presence of the gonococci themselves in the tissues. The latter condition rarely, if ever, exists unless there is some *marked abrasion* in the mucous lining of the urethra, prostate, or vesicles, even then, should the cocci be transported from the prostate to the various tissues of the body their lives would be ephemeral, because it is proven that they cannot live except in a mucous surface.

Many observers have reported the discovery of diplococci resembling closely gonococci, which would decolorize by Gram's Method, and where cultures would produce a urethritis of three or four days' duration but not a true gonorrhea. The writer has noted many similar cases, from clinical observation, and has been thoroughly convinced that these germs are non-virulent gonococci, rendered sterile by their having remained dormant for so many years within the prostate or vesicles.

During an acute exacerbation of prostatitis, causing excessive discharge within the urethra, these latent cocci are swept along with the discharge and at times set up a urethritis of short duration, but they lack sufficient vitality to create a true gonorrhea. But, should the cocci enter the blood current, phagocytosis would be the most probable result, or, coupled with the lethal effect of blood serum upon the germs, they could scarcely escape destruction. Moreover, it is an indisputable fact that gonococci cannot live except within a mucous membrane, and, should it be possible for them to escape the destructive agents before mentioned, in their transit along the blood currents, it would seem impossible that they could live sufficiently long, outside of a mucous

surface, to effect metastatic pathogenesis, except by poisons resulting from their death and decay.

I dwell upon this point at some length because the question is an important one, and one that is presented almost daily in active practice, in regard to obscure chronic diseases.

Should these germs be carried to various parts of the body, and, if it were possible for them to live indefinitely as they do within the mucosa of the prostate, but few who have had gonorrhea could withstand their ravages. Besides, it would be impossible to reach them, if scattered over the entire body, with destructive agents that would not prove fatal to the patient.

The columnar epithelium of the mucosa within the prostate being in close histological relation to that of the urethra, serves to perpetuate the lives of these germs better and longer than other mucous surfaces, though they do not propagate therein. The mild alkaline reaction of the prostatic secretion also ministers to the maintenance of their lives.

The writer believed, as he stated in the third edition of his book, that the toxins secreted by the gonococci were absorbed and carried by the circulation to the various tissues of the body, and there set up the various chronic diseases with which we have to contend. But more recent investigation and clinical facts have proven, without doubt, that these toxins affect certain organs, which in turn give rise to disturbances in certain sympathetic ganglia; and that these ganglia excite vaso-motor changes that give rise to either acid or alkaline conditions. These conditions ultimately produce synovitis, and affections of other serous membranes in the heart, lungs, etc. Certain other lesions, induced by these toxins, give rise to a different perverted vaso-motor

condition, that effects an alkaline secretion and causes conditions reverse in character to those which are caused by acetonemia. These facts have been so often proven that the writer has been compelled by clinical results to adopt this conclusion as axiomatic.

Clinical results following the treatment of the prostate, together with frequent examinations of the prostatic expressions, have convinced me that the prostate is the chief abode of the latent gonococci. I have traced, in numerous instances the origin of remote arthritic and neuralgic pains indirectly to the prostate, by destroying the hidden germs within the gland, which were evidently the *fons et origo malorum,* and which was evidenced by the immediate disappearance of all symptoms. The destruction of the gonococci within the prostate having suppressed the generation of the toxins, and the poisons being no longer carried through the lymph and blood channels to the tissues, all pain would disappear and recovery would be rapid. On the contrary, were it probable that the gonococci had lodged and remained alive, within the joints and other tissues, instead of their toxins, local treatment of the prostate would not relieve the condition, and it would be impossible to do so where polyarthritis existed.

Serous and synovial membranes and nerves are especially marked for the morbific effects of the toxins of gonococci. The pathological changes that occur as denouement of the toxins, in the joints and serous cavities produce conditions favorable for the development of diplococci or streptococci, that closely simulate gonococci; which has given weight to the theory of the extensive migration of the latter.

Owing to the tenacious sequels of gonorrheal infection, it is the opinion of many physicians that, when one once

has gonorrhea, it is never entirely eradicated; and that it is attended with greater fatality than syphilis. The latter view is generally conceded, taking the sequels of gonorrhea into consideration.

Prostatic expressions have shown gonococci to be present in the fluid for many years after complete subsidence of all gonorrheal symptoms. Some writers claim they have discovered latent gonococci in the gland as long as sixteen or even thirty years after its invasion.

The past decade has been prolific of much research as to the habits, life and pathogenesis of these germs, which has been the means of clarifying obscure diagnosis in many instances; and especially since the discovery of their hiding place in the prostate.

Furthermore, these germs may remain dormant secreting toxins that penetrate and maintain an inflamed prostate, but not effect metastasis for a long period, yet cause reflex neurotic disturbances.

When the gonococci have entered the prostate, they begin the secretion of toxins, which at first cause subacute, then chronic inflammation of the follicles and ducts, and subsequently parenchymatous affection of the entire gland; which maintains a constant muco-purulent discharge that is poured out upon the floor of the prostatic urethra. This secretion must necessarily pass along the canal toward the meatus. The discharge may be so slight as to appear only as the *"morning drop,"* or it may become desiccated by the warmth of the urethra, and noted only by the gluing together of the lips of the meatus in the morning; or it may even escape observation altogether. Then again, the discharge may become quite profuse at times as influenced by excitation, by dissipation or other causes, and continue, regardless of all injections, sounds or caustic applications

to the deep urethra, or constitutional medication; as such treatments do not penetrate the ducts to reach the seat of the trouble.

The gonococci may remain hidden within these deep tissues for years in a latent state, unless, by certain irritative conditions, as induced by *bacho et venere,* a copious prostatic discharge is excited, and the germs are carried by the excessive secretion into the urethra, where they may become auto-inoculable, and set up a fresh although mild attack of gonorrhea, or a plain urethritis.

It has also been demonstrated that these germs may remain dormant for three or six years, or even longer, when, under certain conditions, they may become aroused to activity and manifest their pathogenesis; though not in as virulent form as the prime attack. Numerous instances have come under the author's observation where, even among married men, there was unmistakable evidence that latent gonococci had been aroused to activity, developing an acute urethritis which could not be traced to another origin than that of auto-inoculation.

OTHER CAUSES.

During erotic excitement, whether normal or abnormal, the prostate becomes hyperemic, either synchronously with or independent of penile erection. If this excitement is unduly prolonged, by toying with women, indulging continuously in libidinous thoughts, association with prostitutes, masturbation, continence or excessive intercourse, it causes venous stasis or congestion of the gland, resulting ultimately in sub-acute or chronic prostatitis which readily extends and involves the prostatic urethra and adjacent parts. This condition provokes a prostatic discharge similar to that of gleet and

is often mistaken for such. This discharge being poured out within the urethra, induces prostatic urethritis in the same way as do the toxins of gonorrhea, and may extend the entire length of the urethral canal, rendering it tender and supersensitive. Many times have I known such conditions treated many years for gonorrhea, when there were no indications of the latter disease.

It is somewhat difficult to define just what constitutes excessive sexual indulgence, as individuals vary so much in their physical organism and sexual propensities. What would be excessive and injurious to one man, might not be to another.

Masturbation.—In addition to its local baneful effect upon the urethra and gland masturbation is attended with an excessive drain upon the nervous system, and is more apt to provoke some form of mental disturbance, owing to the absence of the natural psychical stimulus of the opposite sex.

The evil effect of masturbation upon the prostate and vesicles primarily, and the nervous system secondarily, has been over-estimated by many, and treated with too much indifference by others. The fact of the almost universal practice, at some time of life, among males, renders it a convenient source to which to attribute all the sexual and nervous diseases, not traceable to gonorrheal origin.

Charlatans reap a rich harvest among youths and, too, older men, who, being over-sensitive, are too prudish or secretive to consult their family physician and fall an easy victim to their tenets and ruse. The family physician is often accountable for this; not making a thorough examination of the case when consulted, treating the matter with too much indifference, and dismissing the patient with a tonic, or telling him it is

"all in his head." The fact is that most of those addicted to the habit are so ashamed of it, that they will deceive the physician, by denying the practice altogether, or minimize the extent of indulgence so as to mislead him.

Objective symptoms alone, as revealed by an examination, can determine the extent of the lesion as induced by the vice. I place but little credence in what one says about the frequency or length of time he *had* indulged (as they all say they have quit now).

Phimosis or an elongated prepuce often serves as an exciting cause, both towards precipitating and perpetuating the habit. The late Dr. S. W. Gross attributed the beginning and continuance of masturbation as due largely to the redundant foreskin.

The deleterious effects resulting from masturbation are not due to the loss of semen, but to the nervous shocks and the local irritation to the sensitive urethra, prostate and vesicles, causing a congestion of these latter two organs; and a subsequent disturbance of the cerebrospinal nervous system. While excessive sexual indulgence is depressing to the nervous and physical organism, and causes congestion and inflammation of the sexual organs, yet it is devoid of the nervous shock that attends the unnatural practice, as well as the local irritation resulting therefrom. The latter provokes more frequent repetitions of the act.

Opportunity, too, also favors frequent indulgence, and the sexual organ that suffers most is unquestionably the prostate gland.

Cold weather or wet feet aggravate all abnormal conditions of the prostate and bladder, and it is often the case that one affected with chronic prostatitis is comparatively comfortable through the summer, but begins to

suffer on the approach of cold weather. Then again one may have been conscious of the existence of some form of bladder trouble for years, but think it of not sufficient gravity to consult a physician, until having gotten his feet wet, or been exposed to severe cold weather, when an acute attack was precipitated.

All forms of prostatic diseases are subject to acute exacerbations; and violent instrumentation, strong injections within the deep urethra, large doses of turpentine or cantharides often provoke an inflamed condition of the gland.

Horseback and bicycle riding are etiological factors of no small importance, and especially when the gland is already tender or when there are other excitant causes. The pressure of the saddle upon the perineum, and the jolting of a misstep of the horse, or by a rough road for the bicycle, is exerted upon the deep urethra or prostate. Many men, suffering from prostatitis, have told me that they had observed the ill effects of a ride upon their wheels.

Continence.—A knotty problem, that often arises in the treatment of diseases of the prostate, relates to the effect, that total abstinence from sexual congress, has upon the gland of robust persons not in position to naturally indulge their sexual propensities. As before stated, it is a fact, recognized by all leading genito-urinary specialists, that the prostate in all healthy men normally becomes hyperemic during erotic excitement; and it is in accordance with natural laws, that such excitement occurs at certain intervals, regardless of whatever moral or persuasive influence may be exerted to the contrary. While this state may be greatly mollified by one's habits, and by surrounding influences to direct the mind into channels of chastity and morality, yet the

intrinsic excitation, as exerted by the sexual organs, in performing their normal functions, is transmitted to the sexual brain or nerve center, which, in turn, excites hyperemia, especially in the prostate gland and penis. This local congestion or nervous excitation can be controlled for a time without injury either to the gland or nervous system; but continual recurrences of sexual erethism, engendering the accumulation of semen, overdistending the vesicles to the extent of causing discomfort, and producing continuous prolonged prostatic hyperemia, finally results in congestion, irritation and inflammation; and, by reason of the highly sensitive nervous organization of the gland, and the reciprocal relation it bears to the sympathetic and cerebro-spinal nerve centers, various nervous disturbances of the latter are produced.

I have had under my observation several cases of chronic priapism and different forms of neurotic aberrations, evidently due to continence as the prime cause, and resulting eventually in chronic prostatitis, and all the attending sequels incident to the disturbance of the sexual organs, and nervous disorders.

There are others where the surrounding influences, united with lascivious readings, libidinous thoughts and the intrinsic excitations of the normal functions of the organs, produce chronic sexual and nervous disturbances at a much earlier date and in a more aggravated form. For this reason I have usually much less trouble in treating married men than single.

Age, vocation and physical condition must also be taken into consideration. It is not difficult for a man past thirty, of delicate physique and whose business involves mental exertion totally at variance with any lascivious impressions, to abstain from sexual relations

for an indefinite period without injury resulting from violating natural laws. But in the case of a young man of robust health, whose occupation requires but little mental exertion, and whose surroundings and associates tend to excite lust, continence would cause much prostatic irritation, congestion and inflammation.

Alcoholic stimulants of all kinds tend to produce erethism and congestion of the gland and should be avoided. Beer and wines have particularly a baneful influence.

SYMPTOMS OF SUB-ACUTE AND CHRONIC PROSTATITIS.

In most cases the symptoms of sub-acute and chronic prostatitis are similar in many respects to those of stricture, localized urethritis, vesiculitis, or chronic gonorrhea; or all these may coexist. In many instances the symptoms are apparently not connected with any disease of the sexual organs. They are manifested by mental depression, lack of confidence, melancholy, impotency, nervous dyspepsia, impaired memory or insomnia.

The eyes are usually dull, and often become so disturbed as to necessitate consulting an oculist.

Dysuria is rare unless complicated with stricture, granular urethritis or vesiculitis. In fact the urine being normally an aseptic fluid resists the development of pathogenic bacteria, although thirty or more varieties of non-pathogenic bacteria are often present therein.

GLEET

A slight continuous discharge is a prominent symptom of prostatitis. It unquestionably signifies the presence of a pathological lesion in some part of the genito-urinary tract.

The origin and source of this discharge has been the subject of much comment and investigation, as well as diversity of opinion among genito-urinary specialists. The fact that such a discharge does arise from some ulcerated, granular or inflamed surface is indisputable; and the urethra and prostatic points being the most favorable sites for producing such discharge, have suffered the burden of caustic applications and operative procedure.

Gleet is not a disease *per se*, but a symptom of an existing lesion, and while it is generally understood to be a sequel of gonorrhea, yet scant discharges from the urethra occur from other causes so closely simulating it, that it is difficult to draw a marked line of distinction.

The writer considers that when a persistent urethral discharge, whether due to gonorrhea or to other cause and of mild character, resists all ordinary urethral treatment, it is symptomatic of chronic prostatitis. Vesiculitis may coexist, and the vesicles should be examined; but as the large majority of cases of vesiculitis originate from the urethra, or prostate, whether due to gonorrhea, masturbation or other causes, the infection or extension of the inflammation must necessarily pass through the prostate before reaching the vesicles, and hence must involve the former. It is therefore irrefutable that the prostate, being in closer proximity to the urethra, and owing to its exposed position with regard to the bladder, is much more liable to become involved than the vesicles; yet the trouble, if of aggravated form, often extends and affects the latter.

The urethra is still more exposed than even the prostate, and never escapes disturbance when disease of the latter has existed any great length of time; as the irritative discharge from the prostate or vesicles passing

out into the urethra—their only source of exit—would eventually provoke urethritis; and upon examination, one finding a sensitive or inflamed canal, infers that the trouble was confined to the latter instead of the prostate. In fact, urethritis is often the most prominent symptom. It is evident, therefore, that by treating and relieving the urethra for the time only, the symptoms would recur, and continue to do so until the prostatitis or vesiculitis was cured. The patient continues to return and report the same "morning drop," or forked stream, as indicating the gluing together of the lips of the meatus, as a result of the drying of the discharge before escaping.

This chronic discharge has been the *bête noire* of the profession from time immemorial, since they have mostly confined their treatment to the urethra, or even should they realize its source, their means of reaching it have been inadequate.

The urethra has withstood sounds, injections, cauteries and lavages for more than a century, and in many instances with some relief, but never been cured.

The reason is, in almost every instance, that the source of the discharge is either from the prostate, bladder, or seminal vesicles, and (not infrequently) from the pelvis of the kidney; when the latter is the source it is the forerunner of true parenchymatous inflammation of the kidney itself.

The objective symptoms reveal a red and often contracted meatus, the lips of which are frequently glued together by the desiccated gleety discharge. Upon passing a bougie a boule the first tender point encountered is usually about six inches down the urethra, at the juncture of the pendulous with the membranous portion. Here there often exists an erosion, granular surface or probably a stricture. Should one of the former exist,

without a stricture, the instrument may be arrested thereat, by the contraction of the muscular fibers, or external sphincter, due to local irritation, induced by the contact of the instrument with the sensitive point. The membranous part of the canal is quite tender, and the most favorable site for stricture, excepting that part near the meatus. On reaching the prostatic portion of the urethra the instrument detects the most sensitive part of the canal, which imparts the feeling of roughness, indicating a granular surface over which the instrument is passing. Just as we regard the tongue as an index to the condition of the stomach, so in like manner do I consider the prostatic urethra symptomatic of the state of the prostate or vesicles. The instrument, if small, often enters the utricle and becomes arrested. This should be especially guarded against, as it often causes one to mistake the case for one of stricture, or if any force be used it may result in a false passage being formed. Should the prostatic urethra be excessively sensitive the bougie may not pass on account of spasm; this condition, too, may be mistaken for stricture or enlarged prostate; but it must be remembered that an organic stricture never occurs in the prostatic portion of the canal.

At times, when the urine is acrid, there is some difficulty in thoroughly evacuating the bladder. The irritative effect of the urine upon the tender part of the canal causes a contraction of the circular muscular fibers of the urethra at that point, which subsequently relax and allow the passage of a few drops or a drachm of urine thereafter. Some have slight pain just as the urine starts, others at the close or urination, which is often attended with the sensation of there being still more to pass.

By means of a flexible bougie a boule, passed slowly along the urethra, the most inexperienced physician can readily detect any stricture or rough, tender patches that may exist therein. Every general practitioner should therefore supply himself with three sizes of these bulbous bougies—Nos. 12, 14 and 16, Am.

The most accurate way of detecting the real character of localized lesions within the urethra and bladder, as well as the condition of the prostate and its ducts, is by means of the writer's improved cystoscope, which can be introduced much more easily and with less pain than any other instrument on the market.

The author's instrument uses the direct light; this is much more accurate in locating lesions than those which are constructed upon the principle of reflected light, which latter are made and used mostly in Europe. It requires skill as well as much experience to successfully use these instruments. They should never be used when the prostatic urethra is so inflamed that it bleeds freely when the instrument is introduced, whether it is excessively tender or not; as a drop of blood will so obstruct the light from the mirror as to prevent one seeing the condition of the lesions. The localized inflammation of the prostatic urethra should always be allayed before this instrument is used. When this has been accomplished by means of the ointment which the writer has perfected for this special purpose, then my improved instrument can be introduced with impunity, and the conditions of the lesion as well as of the abnormal gland and bladder can be easily ascertained, without guessing at the morbid condition or at its location. Besides, by this means, medicaments can be applied directly to the sore.

The improved instrument devised by the author is made in two sizes, 26 F. and 22 F. The former gives

the more satisfactory view and should always be used when the calibre of the urethra permits it.

The instrument should be carefully examined, rendered aseptic, and the light tested before it is introduced. In some few cases the urethra is so callous to instrumentation that it is unnecessary to use an anesthetic, but where it is unduly sensitive I always use cocaine locally, by means of my special applicator, as it is unpardonable to subject one to pain when it can be so easily and harmlessly avoided. For this purpose I use from three to ten per cent. strength of cocaine, dependent upon the degree of sensitiveness of the urethra. In practically all cases the prostatic portion of the canal is the most sensitive, and the greater amount of the cocaine should be applied thereto. By means of my specially constructed instrument described in the supplementary work on Treatment, medicine can be applied to any portion of the urethra or neck of the bladder as desired, and, by exercising any degree of caution, with impunity. The cocaine is drawn into the instrument by means of the bulb at the upper extremity, similar to that of a medicine dropper, and is pressed out in the same manner. If the upper portion of the canal is not tender, or but slightly so, I do not press the bulb until the instrument reaches the prostatic portion, when slight pressure is made, but not sufficiently to force out the entire amount of the fluid. The bulb is then allowed to expand, when the surplus of the liquid is again taken up. After waiting a minute or so the bulb is again pressed slightly as before. This is continued several times before the entire amount is ejected. Should the pendulous urethra be sensitive, the cocaine can be applied along its entire length in the same way as before described. I use a bulb on my instrument that only holds twenty or thirty

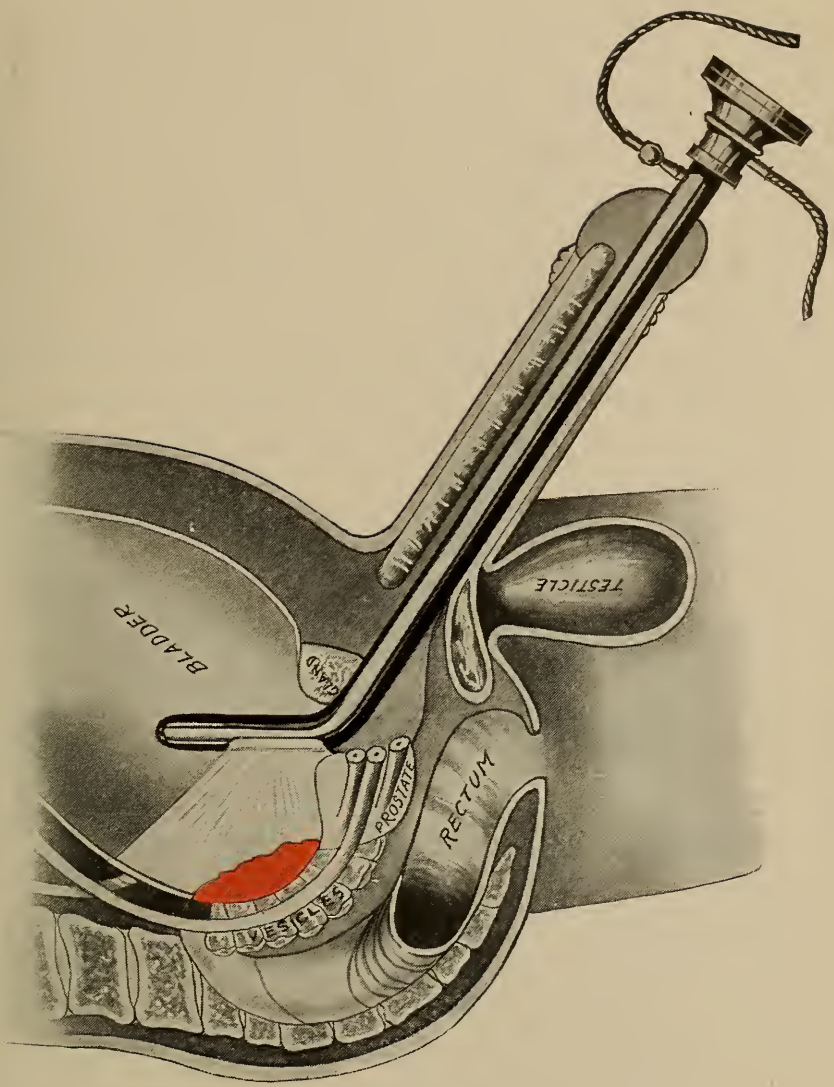

FIGURE XV.

minims, so that a ten per cent. strength of cocaine can be used with impunity and the parts thoroughly anesthetized, whereas, by an ordinary syringe, which is generally used, it would be dangerous.

Figure XV illustrates a case where a local irritation and discharge continued for many months. By means

of the cystoscope an ulcer was located in the fundus of the bladder, opposite the seminal vesicles, which had caused the symptoms puzzling to the writer for many months previous.

Figure XVI gives a practical illustration of the cystoscope as used by the author to determine the exact state of the prostate and neck of the bladder, without having to resort to guess work.

Much discussion has been carried on during the past two decades, and more especially during the last decade, concerning the diagnostic value of the cystoscope. Some years ago a question was put to the leading genito-urinary physicians in the United States regarding the extent of their use of the cystoscope in diagnosis and its value therein. The replies elicited the fact that the consensus of opinion among them was that the instrument was of small value in the diagnosis of disease; and the majority of physicians asserted that they seldom or never used it.

The chief reason of the disapproval of the use of the cystoscope by most of these physicians arose from the fact that it is difficult to introduce, and the difficulty of maintaining the light sufficiently long to obtain a correct view of the parts is great. Most of these instruments are so rough at the juncture of the obturator, the electric light, the curve, and the opening through which to view the parts, that its use is attended with much pain and hemorrhage—thereby obstructing the vision by the blood getting on the glass window. It is absolutely necessary for the blood to be controlled in order to use this instrument successfully. Instruments, mostly of foreign manufacture, are in use; where the light is reflected from the distal end of the instrument, instead of having a direct light as illustrated in Figure

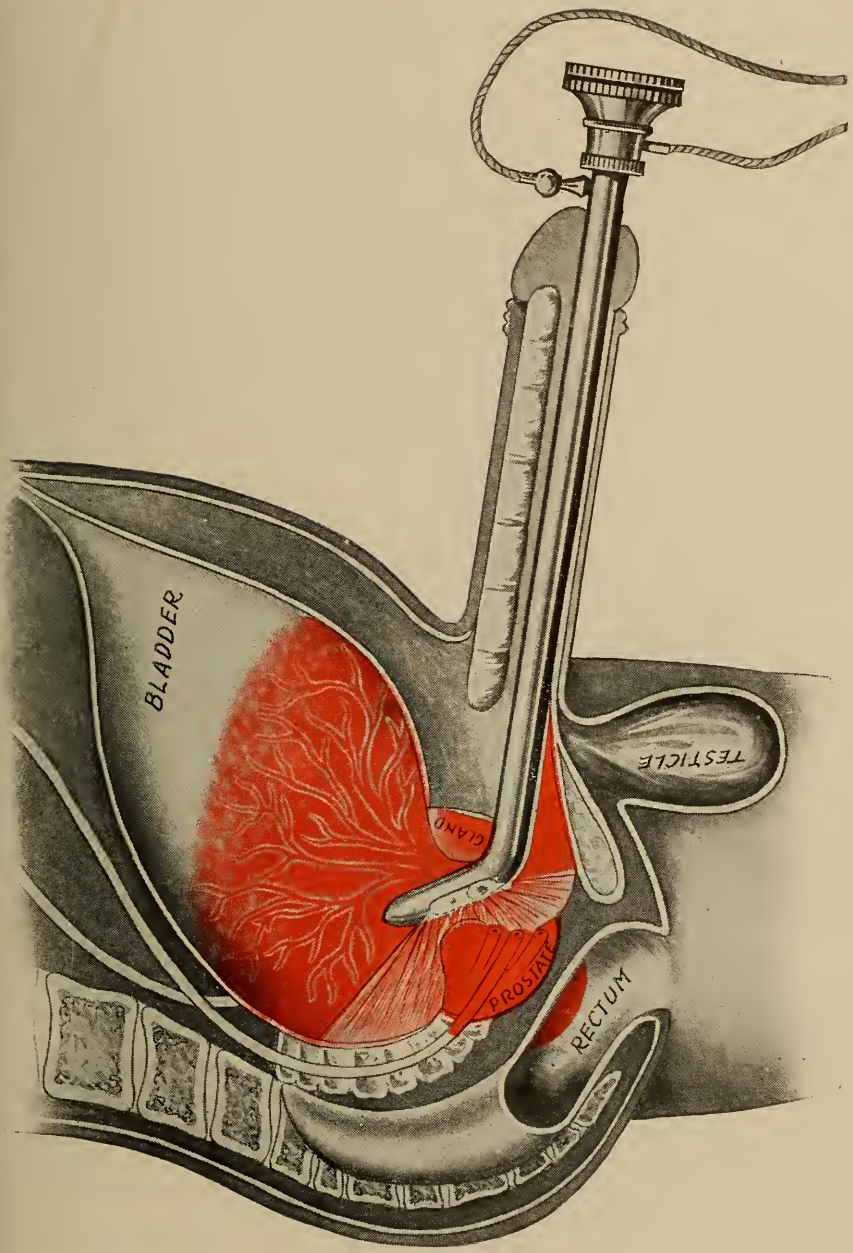

FIGURE XVI.

XVI. The author finds this latter instrument of inestimable value, not only in diagnosing the different conditions at the time of examination, but in ascertaining the conditions as the treatment progresses, or obstinacy of the ulcer remains. By this observation one can determine when the conditions require specific remedies in order to effect an improvement or cure.

Some times there are small ulcers located within the neck of the bladder or prostate that cannot be detected except by the cystoscope. In one case that resisted treatment for many months, apparently the prostate, vesical neck, urethra and adjacent organs were entirely well. Yet there continued symptoms to indicate by way of a discharge, and at times pain, that there was still some lurking lesion. By inflating the bladder to its full extent, with the use of my improved cystoscope I detected a small ulcer as shown behind the prostate and opposite the seminal vesicles in Figure XV. The seminal vesicles had been involved, but were now cured. This ulcer evidently had given rise to the ulceration in that region. Many other examinations have demonstrated, that often when the seminal vesicles have been inflamed any length of time, that ulceration of the bladder at this point often ensues.

The instrument is also of great value in determining differential diagnosis of true hypertrophy, or glandular enlargement, resulting from ulcer or other causes. It is also of value in ascertaining the amount of inflammation of the bladder, often present in long standing cases, where the inflammation extends over one-third, one-half, or even more of the bladder.

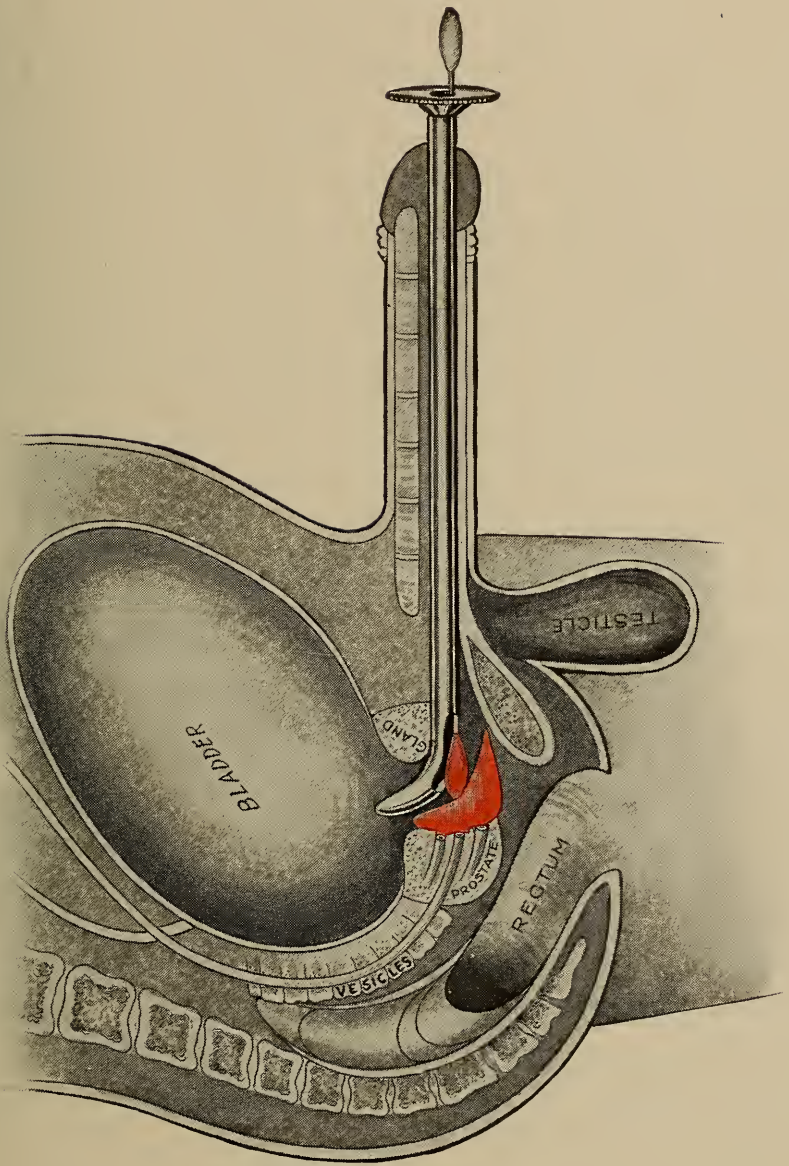

FIGURE XVII.

Figure XVII illustrates the use of an instrument devised by the author, which is of the greatest importance in the treating and diagnosing of any ulcerated surface along the urethral canal from the meatus to the neck of the bladder, and in the prostate. It is of special value to any one not skilled in the use of the cystoscope. By means of this instrument, one can easily detect, by placing cotton on the end of a stick (as illustrated) whether any ulceration or abraded surface exists in the urethra. The cotton is to be withdrawn occasionally at different distances in the canal, for examination, but more especially after it has reached the prostatic urethra or the vesical neck. The advantage of this instrument over the cystoscope consists in its being smaller; it can therefore be introduced much more easily and with less pain. Again, after an ulcer is located, medicines can be applied with the other end of the stick (to which cotton is also attached) direct to the ulcer. By withdrawing the instrument half inch to one inch, with a fresh piece of cotton attached to another stick the superfluous medicine can be absorbed. By doing this any of the medicament which may have become attached to the instrument may be removed, and smearing of the entire urethral canal on withdrawal may be avoided. This is a very important point, and will be elaborated upon in the supplementary volume. It does not really belong to the present volume, but I have taken the precaution to thus give timely warning to any one who might make the attempt to treat cases with this instrument before getting full instructions regarding it.

I also use a proctoscope or sigmoidoscope, which is constructed upon the same general principle as that of my cystoscope. This is a very useful instrument in detecting the condition of the prostate, vesicles, and rectal

mucosa through the rectum. Before having procured this instrument I was in great measure groping in the dark with reference to the diagnosis as to the real condition of the vesicles, perivesiculitis and the rectal mucosa around the prostate.

I have found the best way to use the instrument is to pass it gently into the rectum and up to the sigmoid flexure; the obturator is then removed and the eye piece, or metal plug, is inserted, together with the air bulb. Gentle pressure of the latter distends the rectum around the vesicles, and also prevents the fecal matter from dropping down within the tube. Mild distention of the rectum with air discloses the condition of the vesicles and surrounding tissues perfectly. The tube is slowly withdrawn and at the same time continuing the air pressure when the condition of the entire rectum and prostate can be accurately noted.

The pressure of the air should not be too great or it will cause over-distention of the colon and result in colicky pains.

The voltage necessary for lighting these endoscopes can be obtained from cell batteries, provided they are supplied with suitable rheostats. The objection to cell batteries, however, is that the cells deteriorate with use, causing, when much used, irregular current or voltage.

I prefer the current from the direct incandescent circuit, with a properly constructed controller, when the voltage is uniform, whether used five minutes or all day long.

NOCTURNAL EMISSIONS.

Nocturnal emissions are not infrequent with unmarried men, and especially when granular prostatic urethritis coexists with inflammation of the gland. Such

lesion of the urethra inhibits its normal elasticity, which, as a result, can not be accommodated to the elongated penis when erect, and produces an undue drawing upon that part of the tender canal that causes a fortuitous seminal discharge. One emission often irritates the prostate or vesicles and thereby causes a second or third on successive nights, and occasionally two in one night.

In other cases there is a condition of atony, and a relaxed state of the ejaculatory ducts and gland, when an emission may take place without creating sufficient sensation to arouse one from sleep. Again, these organs may be so sensitive, by reason of these lesions, that in an effort at sexual congress there is a premature ejection; at times, this may occur before intromission.

There is frequently a prostatic discharge, that is erroneously taken to be of a seminal character. These chronic discharges, from whatever source they may arise, rarely cause noticeable systemic disturbances, unless they are very excessive. The pathogenic change in the prostate or vesicles, excites or depresses the nervous system, and so disturbs digestion and prevents in many instances proper assimilation. Often there is little or no systemic disturbance, and one may remain in apparent robust health for a long time, yet he is conscious of something being wrong with his sexual organs. There are others whose general health is very much impaired as a result of disorders of these organs, yet have few subjective symptoms pointing directly thereto.

DIAGNOSIS.

The diseases for which chronic prostatitis is most liable to be mistaken, are stricture and localized urethritis. The latter two may either succeed, coexist with, or be excitant causes, of the former.

The prostatic urethra is the most common site of urethritis and is pathognomonic of prostatitis. As organic stricture never occurs in the prostatic urethra, one familiar with passing a bulbous bougie can easily determine when it has passed the membranous and entered the prostatic portion of the canal. This can also be determined by the length of the channel and the distance traversed by the bougie. Or, the operator may pass the bougie into the bladder, and, by withdrawing it, measure the distance and locate the points where it meets with resistance or roughness at the entrance of the prostatic urethra. There is also, at the point of roughness, a slight sensation of pain or irritation, which may not be felt at any other portion of the canal, or if at all, but faintly.

Owing to the granulated and slightly swollen condition of the prostatic urethra, it encroaches to some extent upon the calibre of the canal, causing some narrowness. This condition may be mistaken for stricture. Furthermore, the channel being sensitive at an inflamed point, the contact of the instrument with the mucous membrane thereat may produce reflex contraction of the circular muscular fibers simulating stricture. This causes either a grasping of the instrument or obstructs its passage for the time. As previously stated, if an instrument of small size is used it may enter the orifices of the ejaculatory ducts or utricle (as they are frequently dilated in these diseases) and becoming arrested thereby, create the impression that stricture exists. I have known such mistakes made and urethrotomy performed therefor.

The first morbific change that occurs within the prostate, is chronic catarrhal folliculitis. This condition may last for years, under strict observance of hygienic laws and temperate habits with little or no manifest symptom

than that of an occasional or persistent gleety discharge; or the discharge may be so faint as to become dessicated after reaching the urethra, and noted by shreds in the first voiding of urine. Subsequently the inflammatory conditions extend to the interior of the gland and provoke interstitial prostatitis, causing soft infiltration with slight tumefaction of this organ; yet, there may be little or no local or systemic disturbance, unless there occurs an abrasion of tissue within the prostate, when the toxins or cocci may become absorbed and engender metastasis.

It is quite common for some men, influenced by these toxins, to become emaciated and delicate, though suffering no pain or marked constitutional disturbance, while others remain robust in appearance, though suffering from metastasis, or pains anywhere from the back of their neck to their heels. Others become nervous from functional involvement of the cerebro-spinal centers, causing melancholia, impaired memory, sciatica, paraparesis and many other forms of nervous disturbances. These changes may develop so insidiously as to create no uneasiness upon the part of the victim, unless the vesicles become involved, or the inflammatory conditions encroach upon the ejaculatory ducts, narrowing their calibre or limiting their normal elasticity to the extent of obstructing the passage of semen altogether; or, should the semen pass through these narrow channels, during sexual congress, it would be followed by dull aching pain, or marked nervous depression.

Dull aching pain in the perineum after sexual congress indicates that the ejaculatory duct is greatly narrowed as well as inflamed. It also is a positive symptom of an inflammatory condition of this gland. Should this pain or aching sensation be only temporary and pass

off within thirty or sixty minutes, the indications are that the disease does not extend to the seminal vesicles; but should it be followed by a dull aching pain in the back or perineum for any great length of time, it indicates that the seminal vesicles are also affected. Conditions are then much more serious than where the gland alone is involved.

The instruments and remedies I have devised for treatment of the seminal vesicles through the rectum are the only possible means of reaching and curing these troubles. But even with them it requires time and patience from both physician and the sufferer. I cannot impress this too forcibly on the minds of my readers, as heretofore physicians have never been able to trace the source of this pain and trouble, with its attendant nervous complications.

Long standing disease of the gland develops a congested state and inflammatory complications of the bladder, rectum, vesicles, and, at times, the kidneys, but the latter are rarely affected to any serious extent.

TREATMENT.

For many years past I have been endeavoring to train my assistants in such a way that they could act independently in properly carrying out my methods. I must confess that so far I have been disappointed with the results. The men in question, when left to their own resources, were never absolutely sure that the treatment they were giving in any particular instance, was absolutely correct. Although one of these assistants had been associated with me at different times for more than three years, at the end of this period he constantly failed in his efforts with the cystoscope; so much so indeed that he could not be induced under any circum-

stances to use the instrument except under the personal supervision of the writer. Two others had become so averse to using it, that they would not do so if they could possibly avoid it. As they expressed it, "they noticed a marked difference in the use of this particular instrument when the writer used it and when they themselves used it." A fourth was so egotistical and self-opinionated that he insisted upon using it upon each and every occasion; this regardless of the crude bungling manner he was manipulating it—besides, he often used it in cases where it was actually specially contra-indicated. When not restrained by the writer he succeeded in giving rise to serious and dangerous troubles in several patients, and probably caused the death of one man. At the time this took place the writer was absent on his annual vacation; he received reports twice a week from the assistant stating that all the patients were doing well, were highly pleased, and progressing satisfactorily. On his return the writer was mortified to learn that there was scarcely one patient but what the assistant had "balled up," to use the term applied by the family physician to one of the patients. Of course the assistant was promptly discharged,—yet he is now in another city applying these methods in his same old clumsy way, and boasting that he had been specially instructed by the writer in the use of them.

I do not wish to convey the idea that the writer alone is capable of using these instruments and methods judiciously and satisfactorily, as there are some physicians to whom he has shown the technique of his special instruments and methods who are now using the same with excellent results. One of these stated to the writer that since he had had the methods practically demonstrated to him, he could now understand why he had failed

before. Previously he would often pass the instrument within the baldder, and apply his medicament at a point beyond the sore. At other times he would stop the instrument and apply the remedy before reaching the sore. The greatest difficulty he encountered in the passing of these instruments, was to determine whether an obstruction met with was stricture, enlarged prostate, or caused by a spasm of the canal; or whether his lack of experience led him to make the curve at an improper time. Although he studied my book as well as others by various authors very carefully, yet they did not give him the knowledge that a personal demonstration of the technique of the instrument did give. Since then numerous letters have been received by the writer detailing this physician's marked success in the treatment of these cases. Of all the cases that he has handled only two were so complicated that he was necessitated to procure my assistance before curing them.

I have received numerous letters from physicians throughout the United States as well as Europe—many asking for advice, while others relate their "ups and downs," and failures, mostly bemoaning their fate of not being able to procure the same results as the writer; many detailing, too, their methods of treatment, and invariably harping upon the unsatisfactory results they procure from electricity. Practically all of them who have described their methods of treatment have reiterated the fact that they have used electricity with my instruments; and almost without an exception they have rendered the patient so tender, as often to set up cystitis, orchitis, and prostatitis, and to confine the patient to bed for weeks. I cannot understand the reason, unless practically all of them are hunting the "short cut" instead of taking time to cure their patients properly. Some of

their patients who finally came to me, stated that these physicians had been treating them by the same methods for six, eight or even fifteen or eighteen months without any improvement; others claim that they had been improved up to a certain point only. If these physicians had consulted my last edition, issued seven years ago, they would have read: "As the urethra and rectum are the only channels through which to reach the prostate for direct treatment these must be rendered and maintained in a condition as free from inflammation or irritation as possible. As the larger portion of the prostate lies between and in contact with these two canals it would be impossible to relieve the gland as long as they remained inflamed."

This is followed by directions to allay all acute irritation as much as possible before beginning radical treatment of the gland. On a succeeding page there follows: "Radical treatment of the gland should be delayed until all acute symptoms of the urethra are allayed." They disregard the frequent expressions throughout the book forbidding the use of electricity until all acute symptoms have been allayed. Even then, I use it very rarely and only for a specific purpose, as will hereafter be detailed; but the strange thing seems to be that each and all of these correspondents (judging from their letters) consider that electricity is practically the only remedy and must be used at all times.

There have been, however, a few physicians, who, even with the crude and imperfect instruments of a few years back had procured satisfactory results up to a certain point. In several instances of this kind that have come to the notice of the writer, it has developed that the physician has succeeded in curing the ulcers at the neck of the bladder and within the prostate. Further prog-

ress was rendered impossible because of the fact that complications were present, such as vesiculitis, sigmoiditis, etc. These had been overlooked by the physician. Their presence maintained the irritation within the gland and bladder—as soon as they were cured, complete restoration to health ensued.

The writer has endeavored to so thoroughly explain the physical, the chemic, electrolytic, cataphoretic and therapeutic properties of the currents in the introductory chapter as to enable one to determine absolutely when to use the current and when not to use it.

In all of my writings I have endeavored to impress as forcibly as lay in my power that it was utterly impossible to cure any disease of the prostate, seminal vesicles, bladder, or even pelvis of the kidney, without at first allaying all acute symptoms, within both the urethra and rectum.

Because of the diversity of symptoms, both subjective and objective, and the many complications arising from the different lesions; the obstacles to be overcome in diagnosing and treating the various conditions that arise as sequelae; the extreme difficulty the writer has experienced with different practitioners in their efforts to successfully cope with these cases; the many points to be determined with reference to the use of instruments and the application of special remedies in the different stages of diseases; and in order also to more thoroughly assist his readers in locating the different lesions and in observing the complications, and then to enumerate the obstacles met with in treating abnormal conditions (many of them being in deep seated organs far remote from the surface); for these reasons the writer has decided to incorporate such matters in a supplementary volume, in which he can make more extended illustra-

tions of the lesions, their locations, and how to reach them; descriptions of his special instruments; and how to apply each and every remedy in the different stages of the various diseases he has outlined for treatment. So full and explicit will be the directions given that any practitioner should be able to satisfactorily use his methods.

One of the great difficulties to be overcome (which practically every practitioner encounters) is to differentiate between acute, sub-acute, and chronic diseases; and to use remedies suitable for each condition, rather than cause much harm by using a remedy which is intended for a different stage, thereby increasing the acute inflammation, and often subjecting the patient to intense suffering and long delayed recovery.

There are a great many men suffering from the diseases dealt with in this work in every locality; and it is essential that all physicians should be able to diagnose these cases correctly, rather than be misled into other topical or constitutional treatment. This does not justify *each and every physician* equipping himself with the various instruments and remedies mentioned in this work, and to apply himself especially to this treatment. There would not be enough cases in any district to justify all the physicians in the neighborhood devoting time, attention, and money to any one particular branch of medical practice. But there are sufficient cases of diseases such as are dealt with in this volume in each and every locality for at least one physician to thoroughly equip himself and to thoroughly master the subject—and he will have all the business he can possibly attend to.

While it is a fact that there are physicians who are devoid of the mechanical skill necessary to successfully

introduce or apply instruments, and who never could make an unqualified success of this treatment, yet there are others in every locality who could make a success of it; and these latter should so apply themselves to it, and abandon all general practice (thereby being out of competition with general practitioners) as to command the respect of their fellow practitioners by their skill in this particular specialty.

To Briefly Summarize.—For one to thoroughly appreciate the advancements made by the writer, and to fully derive benefit therefrom, he should read carefully every sentence in this book from the beginning of the preface, through the introductory, and through each succeeding chapter. There are many things of importance in all these different parts; and should the reader skip here and there (as many do in reading a book), he loses the connection and is never enabled to do the work properly. There are important features in the preface that lead to the elucidation of subsequent discussions and by missing one link in the chain of reasoning the subject matter never becomes clear; and the reader is unable to carry out in detail the train of thought leading up to the cause, diagnosis, and ultimately the treatment.

The great majority of physicians, as well as other men in every line of business and profession, want to take "short cuts" to success. Physicians simply "jump at" the treatment, without reading a word of the instructions relating to the causes, the conditions of different patients, and the different stages of disease, each of which must be treated in a separate and distinct manner. Most physicians are apt when seeking for a "short cut" in a chronic disease, to give remedies which are appropriate in acute stages only, and vice versa. This in part accounts for the failures of physicians, and is

the reason they cannot procure the same results as the writer. This reason more than any other has decided me to first write a treatise upon cause, effect, and diagnosis before writing the supplementary treatise on treatment of these troubles. Those procuring the present volume will be necessitated to read it understandingly before they can decide whether or not they want the supplementary volume on treatment.

The author will make the broad statement that he is prepared to demonstrate with any reasonable number of cases of any age from one year to eighty-five that he will cure from 70 per cent. to 95 per cent. of any and all chronic diseases, including prostatic, kidney, heart, lung, nervous diseases, etc. In making this broad and bold statement, the writer maintains ample margin in his favor in each and every class of disease, and his confidence is warranted by results which have been obtained for more than a decade, and in many thousands of cases. Then, too, he feels and realizes that now he has also the advantages in his favor of the recent improvements, and advancements, and more perfect instruments, that enable him to do more at this date than he has ever been able to do in the past.

He, of course, does not include cases that have been maimed by operations, or where organs have been removed, but he does not exclude any case on account of age or condition. The writer will further emphasize the foregoing statement by stating that his methods are fully elucidated, and based upon physiologic, chemic, physical, and therapeutic laws of nature that are known to many scientists throughout the world. He does not employ some mystic serum from some cold-blooded animal, or from other source equally as depressing, which is capable of contaminating the blood and

tissues of the victims with more virulent toxic matter than is produced by or causes abnormal condition itself. The administration of many of these serums may (if they have any effect at all aside from that of toxic) result in abscesses, from the efforts of nature to rid the system of them; and they serve to lower vital action and render the unfortunate less able to withstand the ravages of the disease, and ultimately bring about an untimely death. I only beg of those who wish to profit by my results as herein detailed, to thoroughly read this book, and if they are satisfied to take up the subject in earnest and profit from the results of my investigations, then they can procure the supplementary work. The writer in beginning this present work had many "ups and downs" and many disappointments, and was often so discouraged as to give the work up at different times, only to go back to it with a greater determination to succeed.

The past two years has marked a new era in the practice of both medicine and surgery. Although isolated cases of disease of the heart, spine, brain and various others of obscure origin had for a long time been detected and relieved, yet within the past year the writer has been so enabled to trace cause and effect from special lesions which disturb certain sympathetic ganglia (giving rise to functional disturbances, and often organic lesion of the heart, brain, spinal cord and other deep-seated vital organs), that he now undertakes the diagnosis and ultimate cure of the majority of these diseases with the confidence with which he formerly undertook the solution of a mathematical problem.

CHRONIC PROSTATITIS AND PROSTATIC URETHRITIS.

CASE 3. Aged twenty-four; single; history, as given by himself, is as follows: When eighteen he had gonor-

rhea which lasted about nine months. During the first stages of the disease dysuria was excessive, the discharge from the urethra being very copious, and followed by vesical tenesmus, chordee, etc. He had several succeeding attacks, which lasted only a few weeks, during which time there was but little pain or disturbance of any character. A gleety discharge followed, continuing up to his twenty-first year, when he was pronounced strictured, and treated for such by means of steel sounds. The treatment was very painful and at first followed by bloody discharges. This continued for about a year, during which time there was a continuous gleety discharge. His health was much impaired; there was a dull aching sensation in the region of the perineum, especially when walking or standing. He changed physicians; sounds were used as before, but larger, and producing hemorrhage attended with great pain. His health continued to grow worse; he became very thin; suffered with anorexia, emissions and weakness of the sexual organs, dull headache, despondency and lack of confidence.

Upon examination I found the meatus red, inflamed, and the lips glued together. There was a granular ulcer in the fossa navicularis about an inch behind the glans penis. On the introduction of a bougie a boule, there was little sensitiveness of the urethra until the prostatic portion was reached, where roughness offered a slight resistance to the passage of the instrument, indicating a granular ulceration, and extreme tenderness. On withdrawal of the instrument pus and mucus were found adhering to it. Microscopical examination did not reveal any gonococci. Upon pressure through the rectum there was very slight tenderness of the gland and little or no swelling.

Cystoscopic examination revealed extensive ulceration throughout the bladder for a man of his age.

This case was long drawn out, with recurrences of, sometimes, better condition, then worse. Finally he was dismissed in practically a normal condition. This case was under observation for several years after dismissal, and there was never any symptoms of the trouble recurring.

In consideration of the marked improvement in instruments for use in the various obstinate and chronic diseases of deep-seated organs, and the recently discovered remedial agents used in connection therewith, the writer has decided to incorporate in a supplementary volume a full and lucid description of both remedies and instruments. By so doing he is thoroughly convinced that any intelligent physician who has been impressed favorably with this method of treatment, and who is determined to succeed in it, can accomplish results that cannot be obtained by any other methods.

The results obtained of late by others with these remedies, convinces the writer that much more decided and satisfactory results can be obtained by means of his improved remedies and instruments than could ever have been obtained before.

A physician in a distant town wrote me stating that he had a man 62 years of age, suffering with enlarged prostate, diabetes, and passing three to four quarts daily, necessitating a continuous use of the catheter. The introduction of the catheter was frequently attended with hemorrhage. It was impossible for the man to come to Chicago for treatment; he therefore begged of me to send him any kind of advice or remedy that might help the patient.

I wrote him that he was asking too much, and that

the case would be difficult for me to relieve or help materially if he were even here in person; but under the circumstances I said "I shall send you a certain remedy for local application as I shall direct; and another remedy to be taken internally for a specific purpose, also an instrument to be used as I may advise." Three weeks thereafter the doctor wrote me, "Our patient has improved wonderfully. He has laid aside the catheter altogether; his diabetes has diminished more than half; and he has gained strength, and is improving daily." So encouraged was I with this and many other similar reports, that since that time I have advised other physicians and laymen to use similar remedies in similar circumstances. In every instance except one the results have been satisfactory. One of these cases reported thus: "I believe it is only a matter of time and patience when I will be entirely cured. I am at present feeling better than at any time within the last twenty-five years."

Until recently I have been very reluctant to allow either my special remedies or instruments to be used by patients themselves, or by practising physicians who had not received special instructions in the technique of the methods—but during the past two years I have so improved remedies and instruments, that I am now confident that any intelligent physician, or (in some cases) laymen, may derive much benefit therefrom, apart from any personal instruction.

Although the above cases have so improved, and are so encouraged as to believe they will be permanently cured, yet there are some of them so complicated with disorders of the adjacent organs that it requires skilled treatment, either by the writer himself or by a physician who has been specially instructed either through the book, or who has taken special clinical instructions on

the technique of the instruments and remedies such as the writer himself uses in individual cases.

PROSTATITIS, STRICTURE, VESICULITIS.

CASE 4. Gonorrhoeal history of seven years standing, with frequent recurrences; gleet constant. Patient had stricture in the membranous urethra, six and one-half inches from the meatus—caliber 12 A. Immediately back of the stricture and extending through the prostatic urethra was a granulated ulcer. There was apparently no obstruction to the flow of urine nor pain during the time, but at the close of the act there would be slight pain and dribbling of urine, lasting from three to five minutes. At times a milky discharge preceded the flow. This preyed upon his mind, as he believed it was spermatorrhea, for which, as he said, "he had taken barrels of medicines." He was troubled with sexual hyperesthesia, insomnia and hypochondriasis. The discharge proved to be a perverted prostatic secretion containing also mucus and pus cells. He was in good flesh, though pale and easily tired upon exertion. Sexual relations were very erratic. At times several weeks would pass without the least desire or even erection. Then again there would be an almost insatiable propensity, but in attempting the act ejection would occur before intromission, followed by a dull aching in the region of the perineum.

Examination per rectum disclosed the seminal vesicles exceedingly sensitive and painful upon pressure. The prostate also was painful when examined in the same way. The pain felt after sexual congress implied one of the following conditions:

(1) the prostate is inflamed, and the ejaculatory ducts also;

(2) the vesicles are also inflamed as a result of extension or inflammation through the ejaculatory ducts to them.

When the pain is of short duration it is pathognomonic of inflammation of the prostate *only*, and of the ejaculatory ducts as they pass through the gland. If the pain is of long duration, and the aching sensation lasts several hours, and is attended by an aching sensation in the back, it specifically indicates that the seminal vesicles are involved, and that the pressure exerted by these vesicles to force the semen through the narrow channels is attended with the symptoms named.

This case was under treatment for several months before the vesicles were entirely relieved; after which the man had no further pain during sexual congress.

In another case, very similar to the foregoing, the patient was 68 years of age, and had had gonorrhea several times, resulting in chronic glandular enlargement of the prostate.

After intercourse, or even during intercourse, this pain resulting from the inflammation of the vesicles and prostate was so excessive that it was attended with reflex irritation that so affected his heart as to make him drop off the woman and become unconscious sometimes for several hours. The man finally died after one of these acts. He was advised to avoid sexual intercourse until he had been relieved of this condition of the vesicles, but he replied that he would rather be dead than to forego the pleasure.

A young man, 35 years of age, had a very similar thing occur to him; but this would not be after each sexual condition, but only occasionally.

Case 5. Single; aged thirty-four; consulted me for "nervousness." He had been a very successful business

man, having charge of a large force of men in an extensive establishment. He was naturally very reticent with men and timid with women.

He had never had any venereal disease, and in fact had no subjective symptoms of sufficient importance to justify an examination of the genital organs. Thinking that close attention to business and long sustained taxation of his mental powers had given rise to the disturbance of which he complained, I advised complete rest, at the same time giving him a tonic, as he was somewhat anemic, though in good flesh. He left my office in good spirits, intending to spend a month or two in the Cumberland Mountains, fishing and hunting. In about ten days, to my surprise, he returned, saying that he believed, had he remained up there a week longer, he would have gone crazy; that, while he was away, he did not think he had averaged two hours' sleep in the twenty-four, and having nothing to do but to think of himself and his condition made him worse than when at work. The objective symptoms, as revealed by an examination, showed an excessively hyperesthetic urethra, so much so that the introduction of a soft bougie caused him to partially swoon and break out into profuse perspiration. He was allowed to remain upon the table, in recumbent position, for half an hour, when he fully recovered, saying that the instrument did not pain him very much, but that it caused a peculiar, indescribable sensation that rushed to his head and caused blindness. The night following he had the best sleep that he had experienced for six months. I had him use a sedative for seven days to allay hyperesthetic conditions of the urethra before proceeding further with the examination.

Upon questioning him further upon the subject, I was able to elicit from him the fact that in his early youth

he had practiced masturbation to a very limited extent, but had not done so for fifteen years prior hereto. He also admitted that he had attempted intercourse twice only in his life and had made such an utter failure, and was so disgusted with himself, that he had never had sufficient confidence to make a third effort. He had noticed a milky discharge at times just preceding the passage of urine, and also when at stool, especially if costive.

Further examination of the gland showed it to be excessively sensitive through the prostatic urethra and the rectum. The case was very hard to control, by way of relieving local irritation of the prostatic urethra and vesicles, which had been somewhat inflamed; but the excessive hyperesthesia was due to his long abstinence. This had been so reflected upon the prostatic ganglion and genito-spinal center as to perpetuate such a continuous reflex irritation upon the central nervous system, as to induce insomnia, melancholia, and nearly every form of neurasthenia (so-called), or nervous diseases in general from head to foot.

The treatment was tedious, in order to allay the inflammation of the prostate, seminal vesicles, and adjacent organs; also to allay the nervous irritability resulting from the nerve reflexes.

Complete recovery ensued in four months.

PROSTATITIS, EPILEPSY, PREPUTIAL IRRITATION.

Case 6. Married; aged twenty-eight, thin, nervous, wild-eyed and as restless a man as I think I ever saw. He was born and raised in the country by an intelligent, well-to-do widow. At about fourteen he began masturbating, and at sixteen had epileptic fits. These assumed a periodicity and at first recurred about every four

weeks, and then every two weeks, often followed by two or three attacks in one or the succeeding day. They continued to grow more frequent and severe until he would have two or three attacks a week. He was at first treated by his local physician with bromides, which controlled them to some extent in frequency and severity, but at the expense of his physical and nervous system. He went the round of neurologists in New York, Cincinnati and St. Louis for ten years. The last physician, after having had him under treatment for more than a year, trephined him, as he said, for too much blood upon the brain. Still there was but little temporary relief. He had taken bromides until he was almost an imbecile, when he returned home. His local physician advised him to get married, which he did about nine months before coming under my care.

The objective symptoms, as determined by an examination, revealed phimosis in a marked degree, the glans penis and meatus being red and very sensitive. The urethra was so extremely hyperesthetic that an attempt at introducing a bougie almost threw him into convulsions. The bromides were continued in small doses for a short time. The epileptic attacks became less frequent and severe until they again assumed a periodicity, returning every twenty-eight days. The inception of his trouble evidently arose from preputial irritation from lack of circumcision. This offending factor was removed.

Patient was under treatment fourteen months. For five months before he was dismissed he had not had an epileptic attack, nor had he taken a dose of bromide for three months. Eleven and one-half months from the time he began treatment his wife was delivered of a girl baby. The patient became quite strong and corpulent, returned to his mother's farm, and I have not heard from him since.

Quite a number of cases similar to the last two have come under my observation. They were traceable to disease of the prostate and exhibited a variety of neurotic disturbances as a result of masturbation, continence, or excessive sexual indulgence.

In many of these cases, as in this, the prepuce was unusually long, and had been producing much trouble. Had it been removed in youth or childhood there would in all probability have never been any trouble when he arrived at maturity.

PROSTATITIS, VESICULITIS, PROSTATIC URETHRITIS, AND IMPOTENCE.

CASE 7. Single; aged thirty-three. The only subjective symptom of which this man complained was total impotency. Otherwise he was in fairly good health, and attended his business daily. He had never indulged in alcoholic drinking. He had masturbated some in early youth, but abandoned it quite soon for sexual indulgence, which he carried to great excess. This inordinate indulgence was maintained for five or six years, when an impairment of function was noticeable. This condition continued to grow worse, until a physician was consulted, who prescribed aphrodisiacs. Temporary excitement followed the use of the drugs, which was soon followed by complete collapse. Other drugs were tried without avail. The physician endeavored to persuade him, as he had no apparent physical ailment, that "it was all in his head." He never had gonorrhea, or any kind of venereal disease. A second, third, and fourth physician was consulted; each of whom treated him similarly to the first without the least benefit. None of the doctors made a physical examination, as they took it for granted, that, as he had never had gonorrhea,

there was no lesion of the genital organs causing the trouble. This treatment extended over a period of six years, and, strange to state, no quack remedies were taken in all this time.

Upon passing a *bougie a boule,* I noticed very little sensitiveness until the prostatic portion of the urethra was reached. Examination with the cystoscope revealed an inflamed and granular surface along the floor of the prostatic urethra. The other portion of the canal was normal. The prostate and vesicles were slightly tender upon pressure. As revealed through the proctoscope the rectal mucosa opposite the gland and vesicles was red and somewhat inflamed, but not abraded.

He had occasional nocturnal emissions, at intervals of from three to four weeks. At times he would go six weeks without an emission, which is not considered abnormal in a man of his age; but occasionally he had these emissions two or three nights in succession, and occasionally two the same night, which evidently was due to long continued use of aphrodisiacs. This case proved quite rebellious to treatment for a time; but finally yielded in about twelve months. Conditions of congested inflammation of the genital organs and the genito-spinal center, as induced by stimulants given constitutionally to restore lost function, are usually much more difficult to relieve than are those cases where such drugs have not been given.

PROSTATITIS, VESICULITIS AND URETHRITIS.

Case 8. Single; aged twenty-seven; gonorrheal origin. This young man had gone the rounds of first the druggists, then the quacks. He was suffering intensely from dysuria, pain in the back, perineum and left groin. There was a gleety discharge, which, at times, was pro-

fuse, then again, very scanty. It was his first attack, and it had been running for eighteen months.

His treatment had consisted of injections, systemic medication, irrigations and sounds. The meatus was very much contracted, and the urethra was tender throughout its entire course. There were localized patches along the canal much more sensitive than at other points. The rectum was quite tender and often protruded while straining to void urine, when at stool. The parts were so tender that I did not attempt a thorough examination at first.

After the first acute symptoms had been allayed by the use of suppositories of boric-acid and belladonna, physical examination revealed three granular patches in the urethra; the first one inch back of the meatus, the second at six inches, and the last in the prostatic portion of the canal. The rectum was inflamed and abraded opposite the prostate, and very red and tender high up and about the vesicles.

There are many cases similar to these with various nervous and physical complications. At times the heart becomes involved,—at other times they have a persistent hacking cough due to irritation, either of the pericardium or the pleural sac, as a result of acetonoemia. These cases are almost invariably despondent, and usually have been the rounds of the quacks, after having at first taken treatment from their family physician. Most generally the latter simply prescribes some innocuous remedy, without making an examination or treating the organs that give rise to the trouble. There are but very few cases at such an early age that have not been the rounds; and most of them believe they are in an incurable condition; whereas the disease yields readily when appropriate remedies are applied to the organs primarily involved.

Many of these cases have either broken off their engagements to marry or have postponed it for a time without telling their affianced the real cause of the delay. In other instances men have been bold and frank enough to disclose the real nature of their trouble. In two or three cases of this kind the intended bride was the means of finding relief, having discovered the existence of this book through the medium of a book store or library.

Case 9. L. J. W. Age 27; strong, robust, athlete, negative history, married, one child. Urine loaded with alkaline deposits and earthy salts; slight trace of albumen, no sugar; Sp. Gr. 1028; temperate in habits. On November 28th, 1908, he incidentally mentioned the superior skill of his physician who had succeeded in removing calculi from his urethra and prostate, stating that he had been suffering with "uric acid diathesis" (as his physician termed it) for many years. I could not, at this time, tell this young man of the danger of these calcareous deposits or stones forming so large a mass, at times, as to make removal impossible, and that this same condition was apt to produce similar deposits or stones in other parts of the body, as in kidney, bladder, the liver, the veins or arteries, as phleboliths, arterioliths, and even gall stones, etc.

About nine months thereafter he came to my office in great distress, stating that he was suffering intensely and could not void his urine; fortunately for him his physician was out of his reach, and he begged me to relieve him at once of his suffering, and the irritation resulting from the formation of a prostatic stone which was too large to be passed. I at once allayed the acute trouble, then relieved him of this prostatic calculus, which had grown until it was a half-inch long, ragged, and completely filled the urethra. It was with much

difficulty that the stone was removed. After I had accomplished this, I then told him of the danger of such stones forming at other points in the body, and thoroughly convinced him that the cause of this trouble was due to a certain local inflammation disturbing first a special sympathetic ganglion and afterwards the vasomotor system.

After the calculus had been removed treatment was directed to allaying of all acute symptoms, the cause of the formation of the calculi was then located and removed. He has not had another one to form since—three years ago.

Case 10. D. E. W. Student; age 23; up to thirteenth year he was in robust health; then began having trouble with eyes, necessitating stopping school; this continued with headaches and restlessness at night; at 15 returned to school, eyes worse and could not read a line, words running together and dark specks floating before vision; stopped school and went on farm, where he worked until 17; again returned to school; could not read a line and had his roommate read his lessons to him; headaches, backaches and nervousness so severe that he would stand for a half hour with eyes fixed, partially crossed, so intense was the pain; he then developed epilepsy (petit-mal); first recurring every three months, then monthly; finally, grand-mal and daily; was given bromides until almost an imbecile; had nocturnal emissions, nightly, often twice; could sleep only on right side; was treated by several physicians, first by means of prostatic massage, then sitz baths and percussion baths, electricity, etc.; epilepsy continued uninterruptedly; went to Battle Creek; no benefit. During early life suffered intensely from indigestion and was restricted to liquid diet, largely milk, which constituted his chief article of food.

Examination disclosed an exceedingly sensitive urethra from meatus to bladder, and introduction of flexible, soft bougie precipitated an epileptic attack, so very hyperesthetic was this canal; the rectum was almost equally sensitive. Treatment to allay these conditions was first instituted; then topical applications. Improvement began at once, first by relief from headaches, then from indigestion. Was also found to be suffering from slight sigmoiditis; after treatment by cataphoresis, passed a large tapeworm, and several days further treatment brought more worms.

Will note here that observation has led the writer to believe that milk given to infants often produces these worms.

Patient's epileptic attacks began gradually to subside, recurring monthly until they finally disappeared, and he has not had an attack now for eighteen months; returned to his school work and finished his education.

Case 11. J. W. B. Stenographer; negative history; age 23. Up to his seventeenth year he was a model young man and in perfect health. He had been a Court stenographer, which implies that he must be expert to hold such position. His was almost an exact counterpart of the preceding case. I never studied two cases more intently in my life than I did these cases. This latter one was more morbidly afraid of his weakness than the former. He could not be sent one block distance on an errand, for fear he would never return. He would always beg piteously for carfare. On one occasion he was sent a mile distant and he lost his return nickel. He struck out for home as fast as he could possibly walk, and completed the entire distance without apparent harm, showing that this fear was morbid. He, too, complained of sleeping not over two or three hours during

the twenty-four. The man was very reticent, and I think very truthful. Although in good flesh, he maintained at all times that he was extremely weak. The case passed out of my mind several years; but finally after a search I located him and induced him to return. He still suffered as before. Physical examination revealed two py-ro-saks and one overticula. These were removed, and this young man is now rapidly recovering his health, and has much more confidence in himself than has the former patient. I shall keep him still under surveillance to note the ultimate result.

It is just such cases as these, no doubt, that result in suicides, and I had fear that both of these would finally terminate in that way.

Case 12. B. D. C., age 32; single; farmer; negative history. He was a strong healthy boy up to his fourteenth year. While plowing he would give out quickly, and would have to stop and sit down at end of each row to rest. His mother, a widow, insisted upon his working to support the family. His nervous condition continued to grow worse until he would become sleepless in spite of being wholly exhausted upon coming home after his day's work. Appetite was good, though suffered from gaseous indigestion and constipation. He continued to grow worse from year to year, until at seventeen he began having epileptic attacks about once every three months. He would sit for hours at a time, his mind apparently blank, unable to remember anything about which he had been thinking. His family thought it all laziness, and persisted in their efforts to make him work. Dosed upon bromides until almost imbecile. He obtained a position in a printing office, but was unable to hold it on account of his wandering mind and repetition of the same thing. Although well devel-

oped and apparently a strong man, he claimed to be unable to walk a block's distance without rest. Was examined and treated by a specialist in Omaha, who decided that he had prostatic trouble. He continued to grow still worse, and after the treatment by the Omaha physician a physical examination by me revealed chronic prostatitis, endocarditis, acetonemia, blood 70 per cent. His pulse would vary, at times was strong and full at 96, and at other times extremely oscillating from 90 to 110. The variation was much more marked upon standing than while sitting, 90 seated—115 standing. Two overticula were removed, and at the end of six weeks he was apparently well, except that he still complained of extreme weakness, and went home with a view of trying plowing and farm work again. I insisted upon his exerting himself regardless of how exhausted he might become, and upon his continuing until he became so tired as to make him sleep at night. He was constantly and *morbidly fearful* that he would not sleep at night; would lie with his eyes open, as he termed it, "watching with the owls." "I have spent fully four-fifths of the nights during the past nine years in trying to sleep. I have counted backward until I can count almost as well backward as forward. I have tried all kinds of schemes to induce sleep. I have walked in the snow barefooted until my feet would ache, yet the pain was nothing compared with that of insomnia, and the dread of not sleeping." Apparently was a bright, intellectual young man. His mother also insisted, after I had written to her, upon his working regardless of his exhaustion, and he was at the same time directed to take physical exercises, night and morning, by means of various movements and contortions of the body. For the first year after his return home he wrote me often, constantly begging for medi-

cines to quiet his nerves and to make him sleep. I disregarded his request. About three years after his return home I wrote to him to learn of his condition; he replied it was about the same as when he left. I advised him to return, as I had found some new lesions in others which I suspected that he probably had, concealed in some organ that I had overlooked. He promptly returned; to my great surprise he had gained over thirty pounds in weight, and was apparently strong and robust, red faced, blood 95 per cent. He still complained of melancholy, insomnia and weakness, although he admitted that he was much stronger than when he left. His physical appearance would indicate a perfect athlete. The only abnormal symptom was in his speech and in his eyes, which were constantly dancing; and though he could look one straight in the eye, there was a twitching and nervous movement. The first day, upon examination, I discovered a "py-ro-sak." Upon advising him to return to his room, he at once began his old tactics of begging for medicines to quiet his nerves and make him sleep. I asked him if he had ever taken such medicines, and he replied "no;" and when I asked, "why do you want to take them now," he said, "I am afraid that after this operation I cannot sleep." I made every effort to learn whether he had been addicted to any drug habit. Reports from his home, as well as my own investigations, proved negative. After a month or six weeks he returned home. That is now a year and a half ago; and, although he still complains, his sister writes me that he is in perfect health apparently.

Case No. 13. W. J. B.; barber; age 29; single; negative history; Illinois; urine, ammoniacal color, acid reaction; normal specific gravity, excessive urea; from seventeenth year had suffered occasionally from attacks

of what he called "rheumatism"; had also suffered with pericarditis and shortness of breath, could not walk two blocks without tiring very much, and could not run upstairs; pulse 90 to 105. At 23 years of age he was compelled to go to Hot Springs, Arkansas; greatly benefited and returned to his work; recurrence of his "rheumatism"; his ankles were very much swollen, especially at times when standing about his chair. Two years after returning from Hot Springs went to Mount Clemens, took baths, and benefited until his money run out and his physician sent him to me, telling him I could cure him.

Physical examination revealed an exceedingly sensitive urethra, granulated prostatic urethritis and at neck of bladder; gland slightly swollen; slight acetonæmia. Treatment to allay the acute sensitiveness and to neutralize the urine, began at once to show improvement in his limbs, and at the expiration of six weeks the swelling had all left his ankles; his heart had regained normal action; returned to his work and reported, as requested, once in every three months for a year, and has had no return of his trouble.

Many cases similar to this have come under the observation of the writer in which lesions of the prostatic urethra or of a certain portion of the neck of the bladder cause an acid urine by disturbance of the circulation by way of the controlling ganglion. This state of acidity affects practically all the serous membranes, including the synovial of the joints (rheumatism), the pericardial membranes of the heart, and the pleural sac encompassing the lungs. The synovial membranes are especially affected because they are aggravated or provoked to an inflammatory condition by friction in walking, and there is a constant movement of the heart in its action of sys-

tole and diastole; as a result the same condition arises therein. It is generally known, not only among the profession but among laymen, that heart diseases are in some way associated with rheumatism, and it is the concurrent opinion that rheumatism produces heart troubles. This is an erroneous idea; the heart trouble results from the acid condition of the blood affecting the serous membranes of the heart (pericardium), in the same way as "rheumatism" is caused by acid condition prevailing in the blood and affecting the synovial membranes of the joints. Relief of the local condition (the acidity), which gives rise to the irritation of the ganglion, which in turn disturbs the vaso-motor system (the primary cause), will remove the whole trouble. As a matter of fact there is no such disease as rheumatism; it is only an affection of the joints and serous membranes, and results from these membranes taking on acute inflammation through the acid condition referred to. Gout is popularly associated with rheumatism, when as a matter of fact, there is no physician who has ever drawn a line of distinction between gout and rheumatism, and their conditions. The only distinction that can be made is that gout affects the joints of the toes, and of the feet, especially of lazy men who sit about and become indolent; and it is due to the fact that the toes are more distant from the heart, and more pendulous, requiring greater effort to force the blood through these extremities and bring it back to the heart.

I shall call especial attention to the fact that this man had no gonorrhea, and never had had any symptoms of it, yet he had the same conditions of local inflammation of the synovial membrane as those cases that had had gonorrhea. In other words, his condition was followed with the same inflammation of synovial membrane as in

those cases that had acquired the specific germ, and what was ordinarily termed "gonorrheal rheumatism."

Many of the men having the local trouble above described (in the prostate and vesical neck), and also having "rheumatism"; are told that they suffer from "gonorrheal rheumatism" when in point of fact, many cases absolutely free from any gonorrheal taint have these "rheumatic" troubles, just as often as those who have had gonorrhea.

Case 14. K. C. B., age 56; married; one child; negative history; very corpulent; swarthy in appearance; easily fatigued upon walking; slight endocarditis; irregular pulse; mild insomnia.

Nine years ago he consulted the writer for partial paralysis of his left arm. It began with pricking, tingling sensation in his fingers, then extended up the arm to his shoulders with constant pain in region of scapula and pectoralis muscles. This condition had been present for twelve or fifteen years prior thereto, gradually growing worse daily. He had consulted a number of physicians, some of whom told him it was a mild, creeping locomotor-ataxia; others approaching paralysis. He was treated by every form of pathy, every form of electricity and local applications, with negative results.

Physical examination revealed chronic prostatitis and parenchymatous inflammation of the prostate. Relief was soon obtained, and following relief of this local trouble the symptoms gradually began disappearing from his arm and shoulder, and in three months' time he was dismissed well.

June 10, 1913, the same man returned, stating that he had never had any further trouble with his prostate, or with his arm since he was cured nine years prior thereto, but that he had another trouble that was annoying him

very much, and apparently it was the only thing that lay between him and perfect health.

This consisted of a constant itching about the anus. Around the perineum and upon the buttocks and back there were numerous small, purulent eruptions, which would break out, itch a few days, then form a scab, and dry up, when others would take their place, growing more numerous from day to day and week to week, until the entire back became studded with these eruptions. Examination revealed a "py-ro-sak," which was removed and relief followed. Four days thereafter, he returned, stating that he had never felt better in his life, and that aside from this eruption, he was in perfect health. Between the age of 18 to 25 years he had never missed a day when he was not necessitated to take anywhere from two to twenty doses of bicarbonate of soda to relieve a gnawing condition of his stomach. On the day after this "py-ro-sak" had been removed, he had not taken a single dose, nor has he taken any up to the present time. The eruption on his back and around the perineum has entirely disappeared, his skin has assumed a natural appearance, and he is growing in strength from day to day.

The "py-ro-sak," to which reference was made, contains from a few drops to half dram of sanguino-purulent matter, which is being constantly absorbed, saturating the blood therewith and rendering it a fertile soil for the development and propagation of any germs that may enter the system. This pus not only supplies the pabulum requisite for these germs, but at the same time it serves to destroy the normal protoplasm, or cytoplasm, of the cells throughout the body, and wherever this pus is absorbed in large quantities it forms in combination with fat cells an unhealthy matter that dis-

places the normal cytoplasm, thereby causing an unhealthy fatty or waxy appearance throughout the body; and even within the heart itself, this "fatty degeneration" is constantly taking place. Just as soon as the cause is removed (the source of supply of this pus to the blood) normal conditions are restored to the entire body, and life greatly prolonged.

This case illustrates many others that have come under the observation of the writer, where pyogenic matter is converted into either abnormal fat and takes the place of protoplasm within the cells of the body, or it forms with mucus another form of degenerative substance that is deposited as a thick, tenacious, colloid structure. It also causes hyaline metamorphosis, and colloid and amyloid degeneration (often found in the kidneys), which is frequently called on account of its waxy appearance, lardaceous degeneration, or tube-casts by others.

These tissue degenerations, or metamorphoses, that take place as a result of destructive transformation, are often mistaken for degeneration of the organ itself. Especially is this so with reference to the kidney, the spleen, heart, lungs, and liver, when in point of fact, these organs are rarely primarily involved, and their affections result as sequels to lesions in other organs far remote from them. In fact, it is rare for these organs to become idiopathically involved.

I can better illustrate the various lesions that give rise to practically ninety per cent. of all the diseases with which we come in contact, by clinically demonstrating from authentic cases that have been of long standing, and have resisted practically every other mode of treatment. Some of these had previously gone under the knife, with a view of clearing up an obscure diagnosis.

Case 15. D. J. B. Age 34; gonorrhea at 20, never entirely recovered; single; in good weight and apparent health, though appetite poor; limbs heavy and swollen above ankles; "rheumatism of the ankles," as he termed it; heart very weak, with endocarditis; had retention of urine twice; eyes bulging with dark rims around them; blood 80; urine loaded with pus and mucus; exceedingly nervous; had been a hard drinker at one time; three years prior was treated with 606; has been staggering in his gait ever since and walks with considerable difficulty; while at Hot Springs (where he had been twice before) he was informed that nothing could be done for him, and was referred to the writer by Dr. Walker.

Physical examination revealed an exceedingly sensitive urethra throughout, prostatic portion being tender and painful; granulations throughout prostatic urethra and neck of bladder with mass of proud flesh obstructing flow of urine. Had been a noted athlete, taking several prizes in athletic contests; over-exertion had caused dilatation of heart from which he has never fully recovered; his pulse has receded from 96 to 108, down to 78 and 84.

After relief of the acute symptoms, complete restoration to normal health of the heart, and all other organs followed.

Case 16. J. B. S., age 22, no hereditary tendency. Up to his twentieth year was in perfect health, then contracted gonorrhea—was treated for six months, was left with chronic inflamed bladder and pelvis of kidney. His mother being a widow and he her only support, came with the young man to see me. For the previous twelve months he had a constant cough, and during the past six months he had been losing flesh, strength and appetite rapidly, with profuse purulent expectoration. Two physicians had treated him for "tuberculosis"; a

third called in consultation corroborated their diagnosis. A friend of his, whom I had cured, insisted upon his coming to see me. Both he and his mother were firmly convinced in their minds that it was true tuberculosis; and the boy had not worked for several months on account of his prostration. They were extremely hard to persuade that the cause of his trouble was the gonorrhea. They both admitted that he had been in perfect health before that, and that the "tuberculosis" followed immediately upon the result of the harsh treatment he had received, setting up the inflammation of the genito-urinary organs; but they believed, as I told them, that they had nothing to lose, as the boy would die unless he procured relief. They reluctantly allowed the boy to submit to treatment, which consisted in the allaying of the sub-acute inflammation of the prostate, of the bladder, of the seminal vesicles and the pelvis of the kidney, all of which were involved, thus supplying ample food for the development of any pathogenic bacteria that might enter the blood. Five days after beginning treatment, the prominent symptoms of pyrexia, insomnia, irritative cough and purulent secretion had greatly subsided, and his appetite began to be ravenous, so much so that it was necessary to control it, as he failed to digest all he ate. Complete recovery, back to work in five weeks from the time he began treatment, and he has not had any sign of "tuberculosis" from that day to this.

Case 17. L. C. B., aged 32; strong, healthy man up to twenty-first year. No hereditary idiosyncrasy, contracted gonorrhea when twenty-two, long tedious recovery, as he supposed. In fact, he never recovered. He suffered with an occasional cystitis, prostatic urethritis, and gleety discharge. At the age of twenty-four, he

began having a hacking cough. His family physician had his sputum examined, and his ailment was pronounced "tuberculosis," He left for Colorado, where he remained (in Denver, Breckenridge, and other places) for four years, returning home with but little improvement. When he consulted the writer he was hacking incessantly with profuse, purulent discharge. He was so weak that he had to be supported on the arm of his mother and brother. It was quite difficult to convince him or his mother, that his "tubercular trouble" might originate from his gonorrhea, although it was made plain to them that he had never had any symptom of that trouble prior to the attack, nor did he have any symptom until two years later. I endeavored to persuade them that it was possible for the gonococci to have become imbedded within the prostate, vesicles or some other organ, and poisonous matter secreted by them to have become absorbed, and infected his system to such an extent as to give rise to his present trouble. He finally, although reluctantly, consented to treatment; when examination disclosed excessive hypesthesia of the entire urethra, and inflamed prostate and vesicles. Immediate relief followed treatment of these local troubles, and at the expiration of six weeks' time he was dismissed a sound, healthy man, and has never had a day's illness since.

In connection with this case and many others similarly affected, although with not so profuse purulent sputum, but an irritative cough, removal of the local lesions within the prostate, urethra, rectum, sigmoid or other organ, has given almost immediate relief to the irritative cough. How is it possible for "tuberculosis" to have become a prominent factor in these cases (and there are many similar ones), where such symptoms have been

prominent, and pronounced "tuberculosis" of ten, fifteen, twenty-five or more years' standing, and entire relief obtained as soon as the local primary cause was removed?

These cases are not rare, and in fact they have come within the observation of most every man or woman who has reached maturity, and taken notice of such cases. The writer himself has had almost an incessant cough, and purulent expectoration (which had been examined and pronounced tubercular), also frequent hemorrhages for the past twenty-five years. These symptoms readily subsided upon resting. A Mr. Ewing, with whom I was acquainted many years, was similarly affected, having had numerous pulmonary hemorrhages about his thirty-fourth year—he lived to be ninety-four.

Case 18. J. B. W., aged 26; no hereditary tendency; up to his twenty-fourth year he was in perfect health; traveling man; contracted gonorrhea at the age of twenty-four. He had been treated by strong injections, causing stricture, then by various methods of sounds, finger massage, irrigations, etc. Eighteen months ago he developed an irritative cough. This continued to grow in frequency of attack until he was coughing almost one-half of the time. There was no purulent secretion at first, but the constant coughing excited tenderness, then pain, then purulent secretion of the lungs. Examinations by different physicians pronounced his ailment "tuberculosis"; he claimed there was no hereditary tendency; there was no cough prior to the gonorrheal attack, and it was extremely difficult to convince him of any connection between this attack and the subsequent effect. He finally yielded to examination, which revealed a tender inflamed urethra, from the meatus to the bladder, also tender prostate, and excessively tender

vesicles, muco-purulent discharge, with slight indications of pyelitis. Relief of these gave immediate relief to his cough, and it entirely disappeared with all purulent secretions, seven weeks thereafter, when he was dismissed, cured. This case has been under observation for the past three years; he has remained well, gaining twenty pounds in weight.

Case 19. Male; aged 36; merchant, married, two children, negative history. Five years ago he began suffering with periodic attacks of coryza, beginning about the first of July, extending six weeks to two months. At first of mild character. Each year growing more aggravated until finally (almost three years ago) he began suffering from hay-fever, of an aggravated form, and necessitating his moving to a high altitude, then to different climates with only temporary relief. Each year seemingly growing worse. During the past year he began assuming attacks of asthma, difficulty of breathing, in walking up-steps, especially during wet, damp, hot weather. On the 1st of March he consulted me for "neurasthenia" as he called it, of such aggravated form that he could only sleep three or four hours during the night. Appetite good, strength fairly good, yet he showed a wild, anxious appearance about his face, and especially in his eyes. Examination revealed little prostatic trouble, no enlargement of the gland, but hyperesthesia of the prostatic urethra; at times voiding urine frequently, at other times almost normal. He was dismissed the first of April, cured of local troubles. His condition has been watched with extreme anxiety. The 7th of July reported well; the 15th of July he reported some slight symptoms of a return. On the 21st of July the symptoms were more marked, but still he could not say that it was his old attack of hay-fever. During this

time neurasthenia had completely subsided—sleeps well, eats well, works well. On September 24th, report was, entirely free from all symptoms; the first time he was free from hay-fever for three years.

Case 20. J. A. W., aged 34; single; nine years previously had contracted his first case of gonorrhea. Three years thereafter he had what he supposed to be a second case, and a third attack shortly afterwards. For the past three years he has suffered intensely from acute attacks of chronic prostatitis, cystitis, vesiculitis and pyelitis. These troubles would produce an acute exasperation at different intervals, sometimes monthly, then again weekly; these were attended with straining at stool as though the bowel was filled with something abnormal that could not be expelled. This was followed by violent nausea and vomiting, which would last for three or four days. Several times during these attacks, he would go into convulsions, which would last ten to thirty minutes; then again from half an hour to an hour, he becoming unconscious during these long attacks. On recovering from one he would be extremely nervous, restless, devoid of appetite, and suffer with insomnia, necessitating the giving of hypodermic injections of morphia. These spells continued to recur more frequently and with greater severity month after month, although he consulted the best physicians within his reach. They were apprehensive of a fatal termination to each spell. Owing to the absence of the writer, the man had postponed coming for several months; but when I returned to the city his attending physician, Dr. Maloney, who had read my book, directed him to come to me.

Upon his arrival, physical examination revealed an exceedingly neurasthenic condition, cystitis, pyelitis of

very aggravated condition, and py-ro-saks. All of these, however, yielded readily to treatment, with the exception of pyelitis which was persistent, and the nausea and vomiting. They were recurrent attacks of vomiting for three weeks during the course of his treatment.

The condition of the prostate, bladder, and vesicles, had provoked an unusual sensation throughout the rectum and sigmoid-flexure.

Vomiting and nausea occurred in the morning accompanying priapism. Both of these symptoms were aggravated as the priapism became more severe in character. This condition lasted quite a while, and at times there was much difficulty in voiding urine. The nausea and vomiting became so excessive as to last throughout the day; then as the disease of the gland progressed they became so intense as to be uncontrollable except by large hypodermic doses of morphia. When the patient came to me these paroxysms often lasted three days, rendering him cyanotic. He had been treated for the nausea and vomiting and for rigid contraction of the abdominal muscles for three years by several physicians, not one of whom had ever thought of the prostate or adjacent organs as being the excitant cause, until his case was undertaken by Dr. Maloney. All the symptoms gradually subsided at the expiration of two weeks after treatment commenced, and the relief of the acute symptoms of the prostate was also effected. The nausea was quite persistent at times, and although I had cut off all the opiates, he begged for them the first few times he had an attack. It was six weeks after beginning treatment before the nausea entirely disappeared. One morning he came into my office with a bright, laughing, countenance, saying, "This is the first morning I

have experienced for three years when I did not wake up nauseated and often starting to vomit, which feeling would last at times several days.'' His progress was slow, but uninterrupted, until he was dismissed, three months thereafter, a sound, well, and happy man. This is the first case I ever had where organic lesions were not prominent, that was attended with such persistent nausea and vomiting. I am now prepared to attribute any form of chronic disease to one or the other of the causes mentioned in this book. During the past few years I have not been disappointed in a single case.

CHAPTER V.

CONGESTED GLANDULAR ENLARGEMENT OF THE PROSTATE, VESICULITIS, COMPLICATIONS OF CYSTITITIS, VEGETABLE GROWTHS, PROUD FLESH, POLYPI, ETC.

This affection of the gland is common in middle age, and occurs most frequently between the ages of thirty and sixty. It is, howeved, not infrequent as early in life as twenty-five and even past seventy, without the existence of true indurated senile hypertrophy. I have had three cases—one seventy-two, another one year older and a third seventy-nine—with congested enlargement, and inflammation of the gland, seminal vesicles and neck of the bladder, without fibrinous induration or true senile hypertrophy.

This condition of enlargement of the gland is exceedingly common. In fact, statistics as recently compiled by the writer, taken from upward of 8,000 cases, show that there were 106 cases of this nature of enlargement (that is, inflamed swollen enlargement) to one case of senile hypertrophy. That is, practically only one per cent of the cases of congested enlargement of the gland are cases of true senile hypertrophy.

Figure XVIII illustrates this form of enlargement of the gland. It also illustrates the extension of congested inflammation of the neck of the bladder. It may, however, extend and involve the entire bladder unless the condition is relieved in the prostatic urethra or at the vesical neck. The inflammation also extends to the rectum as is shown by the red. The most serious extension

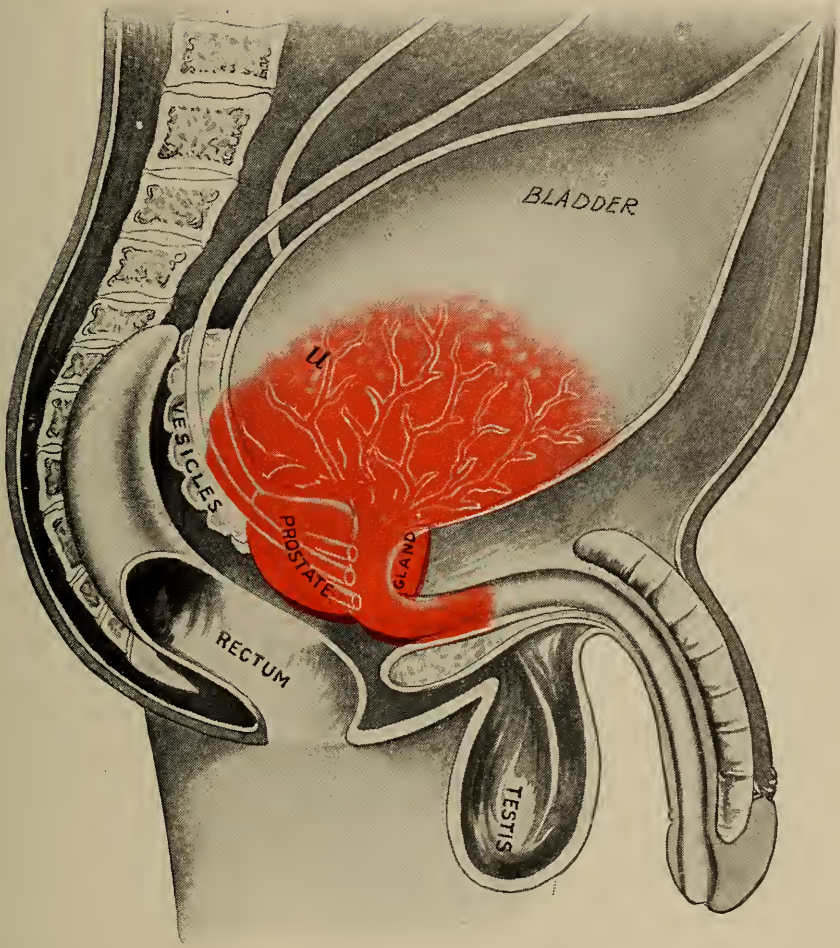

FIGURE XVIII.

of this inflammation, however, is through the ejaculatory duct to the seminal vesicles, involving these latter organs in thickened induration and inflammation of the walls. This also frequently causes inflammation of the mucosa of the rectum, as they are in relation to these vesicles. Then, too, another most serious complication following this trouble, is the extension of the inflammation of the bladder to the orifices of the ureter; so that the inflammation extends up the ureters to the pelvis of the kidney, involving the latter in an inflammatory condition, and resulting in serious or sometimes fatal disease of the kidney, unless the condition is promptly relieved.

The idea, so generally prevalent among the profession, that, when a man past forty or fifty has any disease of the prostate, it is indurated hypertrophy and incurable, is thus erroneous. This disease of the gland is one of passive venous congestion, submucous infiltration and a swollen enlargement of the organ, which generally results in inflammation not only of the gland itself, but of most all the other pelvic viscera. It is somewhat analogous to the congested and inflamed condition of the uterus and its appendages. Not every woman that has venous stasis and an inflamed womb has fibroid tumors developed within its walls. In fact, the latter condition is rare as compared with the number of cases of the former. In like manner fibrinous tumors, or hypertrophy of the prostate, is rare as compared with the numerous occurrences of congested enlargement.

I have treated quite a number of cases of this class of prostatitis, that had been treated by different physicians for many years, and pronounced hypertrophy and incurable. Some of these cases had not only been treated by the family physicians, but by many of the leading specialists in this line of practice.

It is somewhat difficult in some cases to differentiate at first between congested enlargement and fibrinous indurated hypertrophy. The diagnosis will be considered more at length under the head of diagnosis that will follow upon this subject. I shall add here, however, that, basing a statement upon my own clinical experience, at least twenty cases of congested enlargement of the gland occur to one of hypertrophy. I do not include in this estimate chronic prostatic folliculitis common to young men.

Cause. The most potent etiological factors, productive of this form of disease of the prostate, are common with those that excite chronic inflammation of the gland as detailed in Chapter IV. When folliculitis is not arrested and it is permitted to extend and induce parenchymatous prostatitis and plastic exudation, interstitial infiltration is the natural sequence. The exudate, thus produced, extends to the muscular fibers, and its pressure upon the blood and lymph vessels increases stasis, and chronic enlargement and inflammation of the entire gland results.

Inordinate indulgence in alcoholic liquors, whether characterized by excessive bouts of drinking or a moderate though constant habituation, excites and increases congestion of the gland; and, where any previous lesion of any part of the genito-urinary tract exists, it is aggravated. Especially is this fact more apparent when beer or fermented wine is employed.

Since it has become a proven fact that, in from seventy-five to eighty-five per cent. of gonorrheal cases, the cocci invade the gland, and there remain dormant indefinitely, producing poisons that maintain a slow though constant irritation, besides that engendered by the germs themselves and the debris of their cadavers, chronic

inflammatory enlargement of the gland should receive more prompt attention than is generally given to it. One reason that it fails to arouse the uneasiness its importance demands is because of the insidious manner of the progress of the disease, and of the variable character of the subjective symptoms. At times all symptoms may be lacking, or they may recur in a somewhat aggravated form, necessitating the consulting of the family physician, who may not give it the attention requisite, and usually dismisses the case, without examination, by prescribing a diuretic, and thus permits the extension of the pathological condition, not only to the gland, but to the adjacent organs.

Lesion of the gland, whether of gonorrheal origin or due to other causes, is more easily excited by stimulants, at least for a time, until a complete breakdown follows. In other instances the irritation arising from lesion of the gland, whether due to dissipation or to other causes, creates an insatiable sexual desire, that affects the central nervous system to such an extent as to cause mental disturbances of various kinds. Such persons are often too modest to reveal all the facts to their family physician, and frequently endeavor to deceive even the specialist whom they may consult. It is much better, in such cases, for total impotency to supervene than to provoke an immoderate drain upon the nervous system, by excessive sexual congress, which often results in paresis, impaired memory or even insanity. It was no doubt due to this fact that only a few years ago castration was advocated, and performed quite frequently for insanity. It was claimed that marked relief followed the operation in some cases, while others were reported as cured.

The great majority of these cases developed either serious nervous troubles or insanity. The result was

that Dr. White, the originator of this theory, had but few followers; and even these few soon abandoned it as impracticable, as did Dr. White himself.

Ulceration of the rectum, whether resulting from prostatitis, is usually concomitant therewith, or, originating from other causes, evidently provokes and maintains prostatic congestion and inflammation, on account of its being in such close proximity to the gland.

Horseback riding, and especially in those who do very much of it, aggravates an existing prostatitis, even though it may not be the prime cause of it. I have found this trouble quite prevalent among country physicians, who are compelled to visit their patients on horseback. Bicycle riding has equally as bad, if not worse. effect upon the gland. I do not think moderate riding either upon a horse or wheel has any injurious effect upon the prostate, when it is in a healthy condition, and the rectum is free from ulceration. The irritation is transmitted to the gland by the saddle through the rectum and lower urethra.

Cold often excites congestion of the prostate; and when exposure to cold is frequent or prolonged the already inflamed gland becomes specially aggravated. Violent and long continued use of surgical instruments is a potent cause of enlargement of the organ, especially when large sounds are applied, pressing upon the already inflamed gland. The practice is a common one and is generally advised by surgeons; and, in fact, it is almost universally used. Unless the sound is handled by a skilled operator the end of it strikes the gland in such a way as to do much harm. Even the most skillful operators frequently provoke serious troubles by means of sounds.

Strong injections and cautery applications to the pros-

tatic urethra often produce serious trouble. The administration of aphrodisiacs for impotency, which is a common symptom of this disease, has a pernicious effect upon the gland. The exciting by these medicines, of a diseased gland, incapacitated for its normal function, to produce an abnormal congestion and orgasm, often provokes serious trouble. It is a very general practice to give these remedies in a blind manner, without having examined the prostate with the view of discovering the real cause of the trouble.

Symptoms. The symptoms are somewhat similar to those of chronic prostatitis of young men, except that, in this form of disease, there are more complications, and, in some cases, a higher degree of inflammation, as a result of the large size of the gland impeding the free flow of urine. Often vegetative growths or proud flesh spring up in the prostatic urethra, and around the vesical neck, which at times project into the anterior part of the bladder. These often develop into polypoid tumors, that flop about the neck of the bladder like a valve, and shut off the flow of urine, for a time. These polypoid tumors are very vascular and inclined to periodical hemorrhages. They often bleed freely while being treated, or when a sound is introduced.

Almost every form of unnatural discharge from the urethra is commonly termed prostatorrhea, and these discharges are often taken as symptomatic of spermatorrhea. Some of these may be so slight as to appear only as the "morning drop," or in the form of gleet; or it may precede the flow of urine, when it has accumulated within the prostatic urethra, in the form of a milky fluid. Others have the white discharge just at the cessation of the passage of the urine. When the latter occurs in mild form it usually proceeds from the pros-

tatic ducts; and by spasm of the sphincter urinœ in expelling the tardy urine, ejects also this secretion. In other cases, and especially when vesiculitis coexists, spermatic fluid may also pass. These fluids are usually mixed with pus and mucus.

The urine in these cases is almost invariably abnormal. Its changed condition depends mostly upon the extent of lesion, the size of the gland, the length of standing, the bladder complications, and the amount of obstruction to the flow of urine. The vesical neck is the first part of that viscus to become involved in ulceration, and, in most cases, this does not extend further, unless of very long standing. If of long standing it involves the bladder, the seminal vesicles, and often the pelvis of the kidney, in succession, rendering the trouble serious or even dangerous. The urine generally changes from its normal acid reaction and aseptic condition to that of alkaline, and is no longer innoxious to bacteria, but readily favors the development of pathogenic bacteria. The action of bacteria upon exfoliated mucus favors pyogenesis and the production of ammoniacal urine. The latter is exceedingly irritating to the bladder and especially at the neck, causing frequent and painful urination. This is particularly noticeable during the day, when standing or walking, as the urine gravitates to the neck or tender part of the bladder or prostate. The prostatic urethra, being, as a rule, the most sensitive part of the genito-urinary tract, is often rendered spasmodic by the acrid urine, whether due to alkaline or acid conditions, and causing an unpleasant sensation of still more urine to be voided even after the evacuation of the bladder; or it may cut off the flow for a few moments, when it again relaxes, and allows the passage of a small quantity of the urine. The irritation of the

gland or bladder is frequently reflected to the kidneys, causing polyuria, that is mistaken by many for diabetes or Bright's disease. This condition may last a long time without effecting any organic disease of the kidneys.

Systemic disturbances are quite common, either as a result of metastasis, or as a direct sequel to disease of the gland. Toxins or ptomaines emanating from the latent gonococci, and carried by the blood currents to the joints, nerves, and serous membranes, induce metastatic diseases, as synovitis, rheumatism, neuralgia, peritonitis, perityphlitis, pericarditis, and various other troubles, anywhere from the back of the neck to a pain in the heel.

The sciatic nerve, or some of its branches, is the nerve most frequently affected by direct or reflex disturbances arising from disease of the gland. Pain over the hip or in the calf of the leg is common. This pain may also extend to the back, and the use of one or both legs may become impaired.

There is often tenderness in the region of the perineum, or a dull heavy aching sensation, which is felt while standing or sitting. I have known some who could not ride in a buggy with any degree of comfort; others who were necessitated to carry rubber cushions, hollowed out in the center, around with them.

The objective symptoms revealed by examination through the rectum by means of the rectoscope or sigmoidoscope shows (when there is much enlargement of the gland) the latter organ protruding as an oval mass upon the front wall of the rectum. If inflammation of the gland coexists, there is either redness or lesion of the mucous lining of the bowel at that point. We are also able by the same means to determine the amount of inflammation that exists in the seminal vesicles and

sigmoid-flexure. All of these are very important diagnostic points, as relief of the prostate cannot be effected without first relieving the other organs mentioned.

By pressure upon the gland, through the rectum, may be determined somewhat the extent of the inflammatory state, which is usually reflected to the glans penis. It requires an experienced touch of the finger to determine whether this enlargement is due to a swollen inflammatory condition, or to indurated hypertrophy; in fact this particular form of examination is seldom or never conclusive. When the swollen enlarged condition exists it causes such tension upon the capsule surrounding the gland as to render the latter so tense and firm as to prevent the most skilled operators or physicians from detecting the difference between this condition and true senile hypertrophy. In the former case, both lobes of the prostate are usually about equally swollen and tender; but, though somewhat firm to the touch, they do not feel cartilaginous. The lobes of the gland appear more symmetrical, and are not nodulated as they are in indurated hypertrophy and tuberculosis of the gland.

The only advantage in examining the prostate per rectum, from a diagnostic point of view, is to determine the existence of the third lobe. This can only be accurately detected by means of the elongation of the urethra. In short, it requires much practical experience to be able to utilize rectal examinations in differentiating between true senile hypertrophy and swollen congested gland.

The most satisfactory examination to determine the condition of the prostate with reference to acute, subacute and chronic conditions, is through the urethra and bladder, by means of the instruments devised specially for the purpose by the author. As regards senile

hypertrophy, the easiest way to detect it is by means of a small, flexible, elastic, bulbous bougie. By passing this instrument slowly and carefully along the canal experience can detect its passing first through the membranous urethra, then over the triangular ligament and along the prostatic urethra, to the extent of 8 or 8½ inches. Should it then enter the bladder without further resistance, we may conclude that it is not true senile hypertrophy; but should it meet still further resistance and show that the urethra extends as a somewhat rough passageway, then we conclude that there has been formed a third indurated pathologic lobe which prolongs this canal to 9 or 9½ inches. The next most satisfactory way of determining whether the disease be true hypertrophy or simple congested inflammatory enlargement is by means of the author's special cystoscope, with which an experienced eye can detect this elongated urethra and formation of third lobe.

These points are of special interest, and one should strive to perfect himself in diagnosing these conditions, as they are of marked importance in diagnosis, and more especially in prognosis; because the patient will almost invariably ask the physician if his case is curable, and how long it will take to effect a cure.

Complications. The neck of the bladder invariably becomes involved, and is generally quite sensitive to the touch of an instrument or to the effect of acrid urine coming in contact with it. The inflammation is usually confined to a limited area of the mucous lining of the bladder immediately adjacent to the neck or base of the prostate, as illustrated in Plate XVIII. But in cases of long standing, attended with much congestion and inflammation of the prostate, the trouble extends and may involve the entire mucous lining of the bladder. And as

this condition of the bladder is the result of prostatitis, the latter must be relieved before any permanent benefit can be expected in treatment of the former. In fact, I have found that in the large majority of cases the little benefit that would accrue from the antiseptic solutions in washing the bladder is more than counteracted by the ill effects of passing an instrument for the purpose over an inflamed prostate. To avoid the irritation of the prostate by the instrument, the writer has devised means by which the bladder can be irrigated without passing any instrument over the inflamed surface of the prostate.

Urine. The examination of the urine is of great value as an aid to making a correct diagnosis. The main points of interest only will be considered here. By casual observation one can note whether the urine is opaque or translucent; whether its constituents are flocculent or intermixed with the urine; or whether it precipitates to the bottom. The former condition indicates mucus or a muco-purulent admixture. When it precipitates it implies a serious condition and calls for a thorough chemic-microscopic test; and then when the practitioner has had much experience, he may even by casual observation be able to determine its chief characteristics and its source. When it is slow in precipitating and is of whitish gray or reddish appearance, it indicates a muco-purulent nature; when red it implies that blood is also present, and (especially if attended with irritation) that it is serious. A deep yellowish red attended with much irritation in voiding denotes an admixture with bile. Especially is this true when there is but little or no deposit. Chemical examination, however (when it is imperative to be accurate), is necessary. In fact, it is necessary to be accurate in every

instance; but what the writer wishes to convey is, that one with much experience, bearing in mind the above-mentioned characteristics, can detect bile without a thorough chemic examination. Should there be a grayish-white, granular deposit present in the urine when first passed, and not in very large quantity, it implies muco-prostatic origin. Should the quantity of deposit be much larger, and passes more especially at the end of voiding, and be mixed throughout the entire urine, and be more of a whitish than of darker gray (and especially if this condition is periodical and it is voided the first thing in the morning), it is then pathognomonic of pyelitis or inflammation of the pelvis of the kidney, and implies either that the condition is now serious or even dangerous, or that it may soon cause serious complications in the true parenchyma of the kidney. Often this condition exists, and by appropriate treatment the pelvis is relieved of an immense mass of accumulated debris of this character; which indicates by its large quantity that it has been accumulating within the pelvis for a long time. Often I have had patients to state that they had voided a quart of this whitish urine, that was extremely irritating; "burns like fire," as some expressed it. The pelvis of the kidney (as a matter of fact) could not hold a pint; and the large quantity that is passed is due to an admixture with the urine, that washes out, as it were, the pelvis, and gets rid of this accumulated mass. This mass should be chemically examined. It is evident to any intelligent physician, that, should this unhealthy mass of grayish-white, alkaline, earthy, phosphatic debris thrown off from the pelvis become so abundant and so thick as to be rendered incapable of passing through the narrow constricted orifices of the ureters (especially when they are inflamed) it would

cause such pressure upon the true secreting kidney as to give rise to much pain and ultimately precipitate interstitial nephritis. The writer believes that this is the chief cause of Interstitial Nephritis or "Bright's Disease." Too much stress cannot be placed upon the above described condition; and especially when this characteristic urine is voided the first thing in the morning, and in large quantity. Another important feature of this condition is that it very suddenly disappears; and the urine clears up, even in a single day or night. The deposit, however, may probably reappear the next or the third morning. The character of the epithelial cells also shows to a large extent, the source of unhealthy deposits in the urine. The writer has observed many instances where complications of the bladder and other organs coexisted with pyelitis. Large pavement epithelia (characteristic of the mucous lining of the bladder), may be present. Small epithelia of similar character are pathognomonic of pyelitis, and much more serious in character.

The chemic constitutents of this whitish mass that accumulates in the pelvis and that passes off in large quantities, consists mainly of earthy phosphates and alkalies, that often cause the formation of calculi within the pelvis of the kidney, which at times become so large that it is impossible for them to pass through the ureters. Sometimes they pass from the pelvis down the ureter into the bladder and form a nucleus for the development of a stone there. The writer, many years ago, saw one case that had lingered for years, where an autopsy revealed the fact that the pelvis of the left kidney was entirely filled with a calculus that extended up into the calices; the stone was simply a cast of the interior of the pelvis.

There are various other alkaline deposits in the urine, such as sulphates, phosphates, etc., which are of minor importance, especially when compared with those already mentioned.

Mucus, pus, blood and other organic constituents characteristic of inflammation of the prostate as the primary cause (and of the bladder and adjacent organs as sequels thereto) can easily be detected, and relieved by simply removing the cause. Albumen and sugar are often transient in the urine, and are of little significance; as most any nervous disturbance will cause precipitation of either. When albumen is persistent it calls for a thorough examination, to ascertain if it proceeds from interstitial nephritis. Urea (resulting from the elimination of proteids) when in excess becomes quite irritating; and in old men whose eliminative organs are somewhat impaired, an excessive amount of meat should be avoided.

Urea results from the perfect combustion in the body of proteids. Imperfect combustion of proteids results in uric-acid. Ofttimes have I heard men say they are taking this or that medicine for "uric-acid" or "uric-acid diathesis." Uric-acid often results from lesion in an organ causing disturbance in its sympathetic ganglion, that in turn so disturbs the vaso-motor system as to prevent thorough combustion of proteids. The more alkalies taken to remove this symptom, the more certain is it that these alkalies will combine with the uric-acid and form calcareous deposits within the joints or within the body, and ultimately give rise to serious, dangerous, and often fatal, results.

Hyaline, waxy, and coloid casts are often mistaken for tube casts; and pronounced indicative of interstitial nephritis, when such disease does not exist.

Urinary fever often results even where the most judicious means have been observed in treating pathologic conditions of the prostate, bladder, or other of the urinary organs. In all lesions nature attempts relief by throwing out plastic matter and covering these sores or ulcers in order to protect them from the irritating properties of the urine. This plastic material being constantly bathed in mucus or urine, is soft and easily denuded or rubbed off the sore by instrumentation, in the efforts to apply remedies to cure these ulcers. Septic urine coming in contact with this abraded surface, after it has been denuded of its plastic coat, becomes absorbed, causing "urinary fever" as it is termed. The writer has devised a special remedy for use in such cases. It is a gummy, sticky ointment which is both septic and healing; and when applied to these ulcers, prevents the spreading of infection.

Urea exists normally in the urine as a result of metabolism of proteids or of muscles. Five hundred grains are excreted normally every day.

Urea greatly preponderates over the other constituents of urine, and forms normally about one-half or more of the total solids; this can be increased or diminished by the amount of proteids ingested or the amount of physical exercise taken.

The solid products of the urine are mainly formed in the tissues where metabolism takes place; and are elaborated in the liver, and finally separated and eliminated by the kidneys.

During metabolism of the proteids in the tissues a certain amount of them, especially under excessive exercise, escapes complete combustion, thereby forming uric acid to the extent of .03 of 1 per cent normally. Uric acid often accumulates in large quantities under ab-

normal conditions, in many cases largely in excess of its normal proportion. Under abnormal conditions it also results from the breaking up of the nuclein of the cells and forms xanthin, which by oxidation is converted into uric acid.

In a former chapter I mentioned the effect of the various purulent secretions accumulating in excess, and destroying the normal protoplasm of cells; whereby these cells were filled with fatty degenerate mucoid, coloid, and other deposits, causing degeneration of the kidney, heart, lungs, etc. But the nuclein of the leucocytes being oxidized by xanthin through the perversion of the vaso-motor system forms the chief source of uric acid sodiuu urate.

Uric acid exists under a dibasic form—normal amorphous urates, which are practically soluble; and acid urates existing in the form of rhombic crystals, which most probably circulate in the blood as a mono-natrium urate or in combination with some organic acid, or as acid sodium urate.

For a more thorough and extended report upon the pathologic conditions of the urine, reference should be made to standard works on Urinology, as I am here able only to deal in a very cursory manner with the subject, and then only so far as pertains to the special diseases with which this book deals.

Prostatic Calculi. There are certain concretions (prostatic calculi), that form in the prostatic follicles and ducts in adult life. Sir Henry Thompson, who has described them fully, reports that, "of one hundred prostates examined, these bodies were found in all of them." In younger subjects they are very small, and can be detected only with the aid of a microscope; while in older prostates they can easily be seen with the nat-

ural eye. They are entirely distinct from renal or urinary calculi, and begin to form in some part of the kidney or the bladder and continue to develop, by accretion, until they reach considerable size. They most frequently form in the pelvis of the kidney, and after passing into the bladder become nuclei for the formation of much larger bodies. The concretions of the prostate are usually small at first; but they gradually increase in size, and the writer has removed some as large as the end of his little finger. These latter fill the entire urethra; and the conditions are often erroneously diagnosed as enlarged prostate or stricture. Inflammatory conditions of the gland perverting the normal secretions, tend towards developing these bodies, just as a catarrhal condition of the pelvis of the bladder and cystitis produces urinary calculi.

Owing to their extremely small size, they very rarely give rise to trouble in young men, although I have detected some as large as a pea in men only twenty-six years of age. In older men with swollen inflamed prostates, they act as foreign bodies pressing upon the different portions of the sensitive gland and give rise to marked irritation, which is manifested by frequent micturition, vesical tenesmus and pain in the region of the prostate, perineum, glans penis or fossa navicularis. They are usually rough upon their surface; and, when they develop to the size of a pea, often give rise to prostatic abscesses, besides obstructing the flow of urine.

These prostatic calculi often become lodged in the small ducts of the gland at the entrance to the urethra, and give rise to excessive irritation in voiding urine. Many such cases have come to the writer, reported to be suffering from hypertrophy or enlarged prostate, who had been advised to have the gland removed. When

the writer succeeded in dislodging these concretions and causing them to escape through the urethra, the trouble was at once relieved. A skilled operator can easily detect their presence by means of the cystoscope.

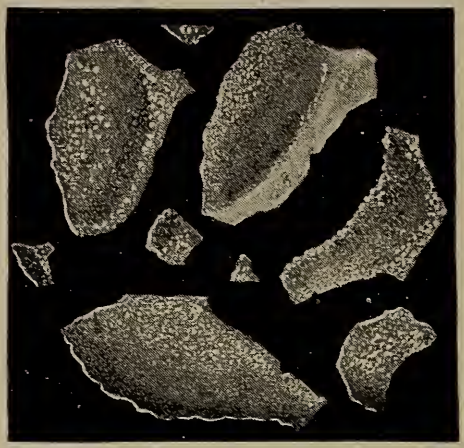

FIGURE XIX.

Figure XIX shows specimens of these concretions, that were passed by a patient sixty-one years of age, with an exceedingly tender and irritable prostate, during the evening following a treatment by cataphoresis. The urine was passed into a porcelain vessel, and allowed to remain over night. On the following morning it was poured off, the residue adhering to the vessel. The vessel was then rinsed with clear water, and the residue scraped from the bottom of the vessel, and preserved. It was firmly glued together by a muco-purulent admixture, and was broken apart in pieces of different sizes, as shown. There was quite a large number of these pieces, weighing in all about a drachm. The large majority of these were destroyed by experimenting upon them with the combined properties of different chemicals and electrolysis, in order to determine the agents that would be most active in their disintegration, and, at the

same time, the least irritating to the gland. The remaining pieces were pasted to a piece of dark paper and a photo engraving, or "half tone," made from it, as illustrated.

Sympexia. In addition to the calcareous formations that are so often present in the ducts and follicles of the congested prostate, there exists occasionally a lumpy, gelatinous substance of a whitish or light red color, called sympexia. These bodies vary in size from that of a small pea to twice that size. They frequently become quite firm and provoke much local irritation of the gland and vesical neck, causing frequent and painful micturition, and even abscesses in the prostate, when they become too firm and large to pass off through the ducts. They have also been detected in the seminal vesicles, where doubtless most of them begin to form from pent up, unhealthy semen and the morbid secretions that result from the inflammatory condition of the vesicles. They no doubt assume their firmness in their tardy course through the prostate, where they mingle with the calcareous matter formed in the latter.

They do not pass at regular intervals, seldom daily, and usually follow the emptying of the bladder or the discharge of fecal matter while at stool. I have noted some cases where they would pass once or twice a week; then not again for a month. When they pass often, they are of lighter color and less firm than when they have been pent up in the gland for a longer time. Their presence causes great annoyance to many men, who mistake them for semen. They may occur in any stage of prostatitis, in young, as well as older men. I have noted them more frequently in young men, leading a life of continence, or in middle-aged men with long standing prostatitis.

PROSTATIC ENLARGEMENT AND MELANCHOLIA, OBSCURE ORIGIN.

CASE 21. Bachelor; forty-eight years of age; weight one hundred and seventy pounds. He had practiced masturbation in early life moderately—never had gonorrhea. Always lived in a small town and had been successful in business. Up to his forty-fifth year he had been in good health. About that time he began occasionally to pass sleepless nights, and gradually grew worse. This continued for about one and one-half years, when he became melancholy and despondent about his business. His brother had noticed, at times, mental aberration, and, after consulting the family physician, decided upon placing him in a sanitarium. The patient tacitly consented to go, but on the evening before the day fixed for departure, he surreptitiously left his home, and wandered about from place to place for more than a month, when, upon inquiring for a physician, he was directed to me.

He was very secretive as to his family and home, but talked very intelligently and freely about himself, his wanderings, habits and the foolish things he had done; this had induced his brother to think he was verging upon lunacy, of which he himself was cognizant. The subjective symptoms pointing to disease of the gland were quite meager, and he was loth to submit at first to an examination.

He, with two other prominent men of his town, was appointed to investigate the stealing of some cattle. The evidence was quite clear and pointed directly to the accused. On the day before the trial the patient conceived the idea that he must come to the rescue of the culprit and protect him at all hazards. A life-long friend of

his who also knew the damaging evidence also spent the night with the accused man at the latter's house. Realizing that he and his friend were the only ones who could convict the accused, so obsessed was he by the idea of saving the latter that he could not rest; patrolled the house all night long, and actually tried to kill his friend. This aberration of mind resulted from prostatic troubles, and disappeared after the disease was cured. There have been many similar cases brought to my notice, where the party affected also endeavored to kill his best friend, on account of mental aberration, superinduced by this reflex prostate irritation causing disturbance, first of the prostatic ganglion, then of the genito-spinal center, and ultimately persistent disturbance of the reasoning faculties of the brain.

So many of these cases of mental aberration arising from reflexes of abnormal conditions in the pelvic organs have been brought to the notice of the writer that he believes that a large proportion of men incarcerated in lunatic asylums are brought there primarily by the effect of these lesions.

The urethra was very sensitive throughout its length, and, in the prostatic part, quite painful at the touch of the flexible bougie. The gland protruded into the rectum to the extent of flattening fecal discharges. Digital pressure upon the prostate through the rectum caused an aching pain in the region of the perineum and bladder.

Granulated inflammations throughout the prostatic urethra and neck of bladder were prominent symptoms.

His recovery was rapid, and at the end of the first month he was sleeping normally, and his mind restored. It was at this time, after his normal mind had been restored that the patient gave a long and detailed his-

tory leading up to the mental aberration, and the attempt to kill his best friend. After being restored to health he was loth to return home, fearing a recurrence of his trouble, besides dreading the incident publicity. The treatment was continued two months to reduce the enlarged gland. Recovery was permanent.

PROSTATITIS, VESICULITIS, RECTAL ULCERATION.

CASE 22. Bachelor; aged forty-four, had first attack of gonorrhea at twenty-two, which was quite severe, and continued for several months, finally terminating in gleet, and, as he thought, stricture. He had several mild attacks of acute gonorrhea, the gleet continuing during the interim. He had been treated several times with sounds for stricture. He suffered constantly with his back and limbs, and had made several trips to Hot Springs, Ark., for multiple arthritis. He was always benefited by the Hot Springs baths, but the pains would recur in from four to six months thereafter. Upon examination I found the urethra slightly tender an inch back of the meatus, and upon the lower surface. The other portions of the canal were healthy, except the prostatic, which was very much inflamed. There was no organic stricture, nor do I think he ever had any, though he had been advised several times to submit to an operation for such. The long standing granular inflammation of the prostatic urethra, with the enlarged gland, had encroached upon the caliber of the canal at that point, narrowing it and obstructing the free flow of urine, at times, when it was acrid; and also the free entrance of an instrument to the bladder.

The gland was swollen as determined through the urethra and rectum, and painful upon pressure; this

pain was reflected to the glans penis. Both lobes of the gland were equally involved. Immediately opposite the prostate, upon the front rectal surface, was an elliptical ulcer an inch and one-half long and three-fourths of an inch wide. The vesicles were tender, and the rectal mucosa opposite them was inflamed and thickened, but not abraded. After several examinations of prostatic expressions, gonococci were finally discovered.

Recovery was rapid; no return of pains since his dismissal, 10 years since.

GLANDULAR ENLARGED PROSTATITIS, CYSTITIS.

Case 23. Bachelor; aged sixty-nine; robust, had led an outdoor life. He had gonorrhea in early manhood, and quite a number of subsequent attacks. He had suffered with his bladder and prostate for fifteen years, and had been treated by massage of the gland, sounds, irrigation and cautery applications to the deep urethra. He had just left a genito-urinary specialist when he consulted me, after being treated with large sounds daily for six weeks.

He was suffering with frequent and painful urination, voiding it on an average every thirty minutes during the day, and hourly at night. The urine was of light color, laden with mucus, pus, urea and of ammoniacal odor. I did not attempt an examination at this stage, but made applications to allay acute symptoms. Rest in bed was enjoined. After three days the acute symptoms had been allayed when an examination revealed a congested glandular enlargement of the prostate, prostatic urethritis, and cystitis. He had been washing out the bladder with boric acid daily, which I had him discontinue.

He was treated similarly to the patients before mentioned, after acute symptoms had been allayed. His improvement was rapid, and at the end of the third month the urine was cleared up, and voided about four times during the day and once through the night. He would occasionally pass the night without having to get up; then again he would have to pass his urine twice in the night. After his return home he continued to improve until conditions were about normal for a man of his age.

Five years later he began having some difficulty in starting the flow of urine; then periodical hemorrhages would occur. By cystoscopic examination I detected a small vegetative growth, almost the size of the end of one's small finger, attached to the lower part of the neck of the bladder. It was highly vascular and would bleed freely when touched. Its free extremity floated about the vesical orifice and acted as a valve that at times shut off the flow of urine. Six months afterwards hemorrhage again recurred. Cystoscopic examination revealed a short pedicle of the tumor with an abraded surface. This was promptly healed and he has had no further trouble with it.

Similar patients have come under my care, suffering with vegetative, polypoid, vascular or semi-fibroid tumors protruding from the base of the prostate into the bladder, which act as a valve to obstruct the passage of urine. Some of these cases have yielded readily to treatment; others have been persistent and unyielding, with a continued recurrence of periodical hemorrhages. Polypoids at the neck of the bladder are extremely difficult until after the gland has been cured. Besides, their presence complicates both the prostate and the bladder, and is often attended by serious and even dangerous sequelae, and causing the bladder to become

filled with blood. The bleeding is quite difficult to arrest. Cases of profuse hemorrhage should always be regarded with suspicion, and especially if the hemorrhage recurs two or three times. Those that have proven so rebellious to treatment have been of fibrinous character.

CHRONIC ENLARGED PROSTATITIS, VESICULITIS, AND CYSTITIS.

CASE 24. The patient was seventy-two years of age, costive, constant pain in back and perineum, the latter necessitating his using a rubber cushion, hollowed out in the center, to sit upon. The urine was alkaline, heavily laden with mucus and pus, one-fifth of which would be a semi-solid mass upon settling; and, at times, strongly ammoniacal. Fecal matter passed in lumps or flattened. He had been treated by the usual methods, with sounds and irrigations. The prostate was very large but not tender upon pressure. The vesicles were similarly affected. The prostatic urethra was quite tender. He had a constant urethral discharge. He was given temporary relief and then returned home, where he remained two months, then came back for further treatment.

He was now able to ride about in his buggy, dispensed with his cushion, but was still unable to evacuate his bowels without the use of medicines. There was only a trace of sediment in the urine, and the urethral discharge was scarcely perceptible. He remained under treatment four weeks at this time. The prostate was reduced almost to normal, the urine had changed to an acid reaction, free from sediment, and with specific gravity of 1022. He was comparatively free from pain. He again returned home and I did not see him for two years. He had been comfortable during all this time, with the exception that he occasionally had quite copious

and irritative urethral discharge. Upon examination at this time I found the prostate, about normal in size and non-sensitive. The vesicles were tender, and the rectal mucosa surrounding them thickened, and unduly red.

A detailed account of the methods used in his last treatment appears in the supplementary volume.

I have heard from him several times since he went home, and he tells me that he is now quite well, has had no return of the discharge and rides on an average of fifteen miles a day on horseback.

CONGESTED GLANDULAR ENLARGED PROSTATE, URETHRITIS, MULTIPLE SYNOVITIS.

CASE 25. Married; good physique; aged forty-eight, two children, negative history. He had been confined to bed for four or five months prior to seeing me, with polyarthritis, including the shoulders, wrists and lower limbs. He had been dosed with all the rheumatic remedies about which the profession have any knowledge, with only temporary relief. There was little or no swelling of the joints, but moving them caused much pain and creaking. He was unable to dress himself, but was able to walk about. The prostate gland was very tender, both through the urethra and rectum. There was no apparent urethral discharge, though the prostatic part of the canal was very sensitive. He began improvement after the first week, and the stiffness and pain in the joints left him at the end of three months' treatment of the prostate and vesicles.

ENLARGED GLANDULAR PROSTATITIS, CYSTITIS, PROSTATIC CALCULI.

CASE 26. A mechanic, aged sixty-two, married. No gonorrheal history. He had never taken a drink of alcoholic liquors nor used tobacco in any form. Up to

his fifty-fifth year he was free from any symptoms of disease of the bladder, prostate or kidneys. About that time he began passing urine more frequently than normal and it became noticeable when he was chilled, or his feet were wet, that it irritated his bladder, which necessitated him to evacuate his bladder more frequently, both day and night. He resorted to the ordinary domestic remedies with temporary relief. Subsequently he began, during paroxysms of dysuria, to pass some blood at the cessation of the flow. The hemorrhage became more marked in time, and was accompanied with pain in region of the perineum and bladder. All symptoms increased in severity, compelling him to seek relief. He then consulted a genito-urinary specialist, who began the use of sounds. This aggravated his symptoms. He next underwent the Bottini cautery operation, which was followed by profuse hemorrhage on the second day to such an extent that he became almost bloodless. The hemorrhage was finally controlled and he had a slow tedious recovery. This was followed by some temporary relief, when he relapsed into still worse condition than before the operation, and was confined to his bed for several weeks with some form of fever. On recovering from the fever he came to me for treatment. After two weeks' treatment his condition was so much improved that he returned home.

He was very much emaciated, anemic and voiding urine on an average, during the day, every fifteen minutes, and at night about every forty minutes. He suffered with constant pain in his back. The urine was strongly alkaline and contained a heavy sediment of mucus and pus, of ammoniacal odor, and occasionally tinged with blood.

He returned to work handling heavy machinery, and

I did not see him again for three months, when he returned with the same symptoms somewhat aggravated. Treatment was again resumed with variable results: at times there would be much improvement, then he would relapse into his former condition. During all this time, however, he was continuously at work carrying heavy machinery. One day following a treatment of urethral cataphoresis to the prostate he passed quite a quantity of prostatic concretions, varying in size from a pin point to a mustard seed, as illustrated by Figure XIX.

He finally became discouraged with my treatment and sought the advice of another physician.

I did not hear anything further from him; but about one month thereafter I incidentally noticed an account of his death in a hospital as the result of an operation. I never learned the nature or purpose of the operation.

Case 27. Was similarly affected to the foregoing. He, too, had been operated upon with the Bottini cautery and by the same physician. On the fifth day after the operation he had a violent hemorrhage which lasted several hours, rendering him unconscious and almost pulseless. The hemorrhage was finally controlled after many hours' work by the physician. This patient was treated in a similar way to the preceding one, and improved more rapidly. In fact, he was so far relieved of irritation about the bladder and prostate that I thought at one time he would ultimately recover; but he, too, had some operation performed upon his bladder or prostate, and I have never since learned the result.

In these cases there were no indications for the Bottini operation; and I do not hesitate to state that it was made, as I have known others to be made, in an empirical manner, without reference to the exact diagnosis of the condition of the prostate. The bleeding, as

result of the operation, relieved for a time the congested state of the gland, and it, together with long rest in bed, relieved temporarily the inflammation, but at the expense of the irreparable injury to the gland, as denouement of the cut and cicatrix. The only indication where such an operation is at all justifiable is in those cases where an obstruction forms at the neck of the bladder by way of a firm fibrinous band; or, in other words, where there is a development of the third or middle lobe of the prostate. When the latter condition exists to such an extent as to obstruct the flow of the urine, it may be severed with little danger to life, either direct or indirect, and especially after the case has been prepared for such an operation by the reduction of acute congestion and inflammation.

PROSTATITIS, VESICULITIS, PROSTATIC URETHRITIS, SYMPEXIA, HEMIPARESIS.

Case 28. Merchant; married; aged fifty-five; gonorrheal history. He had been treated several times by means of sounds, massage of the prostate, internal medication, etc.

Examination showed an enlarged and inflamed prostate, perivesiculitis and inflammation of the neck of the bladder. The right leg became impaired and grew gradually worse; then the arm and hand on that side were also affected after a year's existence of the trouble. There were various shaped lumps of a tenacious character that passed from the urethra, at times following the emptying of the bladder in the last efforts to expel its contents and again on evacuating the bowels when costive. There was a perverted sexual propensity, often a premature discharge of semen during sexual congress, then again a condition of inertia.

The gland was enlarged and inflamed, the rectal mucosa, around the vesicles, was thickened and unduly red. The prostatic urethra was very tender. The lumpy discharges (sympexia) consisted of mucus, calcareous matter and disintegrated semen.

He was anemic, emaciated, costive, and dyspeptic. Complete recovery followed five months' treatment. The lame leg was somewhat sluggish and heavy for a year afterwards, but finally regained normal condition.

Case 29. J. B. C.; age 34; single; no marked hereditary tendencies, father and mother both living to old age; his life up to the sixteenth year was uneventful; at that time he had gonorrhea, which continued from the acute, sub-acute and chronic stages throughout several years. Finally he consulted a physician who began using sounds; acute cystitis followed for about three weeks. Went to Hot Springs in 1903. Sounds were used and other similar local treatment given with massage of prostate through rectum. This resulted in complete retention of the urine, necessitating the use of the catheter. This was followed by an abscess of the prostate which ruptured through the prostatic urethra. During this time he was compelled to evacuate the bladder three to five times during the night and almost hourly through the day. He went to Battle Creek, Michigan, in 1906, where he remained two months; no relief; back to Hot Springs in 1908, when he began having trouble with his heart, marked regurgitation and pulse varying between 98 and 116; unable to walk upstairs; in 1899 he was directed from Hot Springs to consult the writer by Dr. Walker. Physical examination resulted in discovering acute prostatic urethritis, swelling and parenchymatous enlargement of the gland, vesiculitis, cystitis, valvular insufficiency and endocarditis, acetonæmia very marked.

First efforts were directed toward relief of the acute symptoms, followed by treatment of the cystitis and vesiculitis, then to reduce the prostate. Relief of the heart symptoms immediately followed the removal of the other abnormal conditions.

His feet and legs were swollen up to his knees, necessitating the wearing of slippers. Progress in this case was steady and uninterrupted toward recovery, which was complete at the expiration of four months, when he was discharged. He returned on June 22, 1912, anticipating marrying, when thorough examination failed to disclose any organic lesion and he now reports himself as well as he ever felt in his life.

Case No. 30. A. B. T. Farmer; age 38 years; weight 135 pounds; six feet tall; Kansas; mother still alive; father died of Bright's disease (so-called); negative history; first troubled five years ago with constipation and headache; then became prostrated, very weak, nervous breakdown, constipation, and "rheumatism," legs swelling to knees; some days could not walk three blocks without sitting down to rest; better at other times; necessitated to void urine once, and often twice during the night; gradually growing worse; urine filled with urates and calcium phosphates; nocturnal emission alternate nights, and often two during same night. Was examined by two doctors who pronounced his ailment heart disease and consumption; prostate and rectum not examined; sent to Boulder (Colorado) Sanitarium, where he remained three months; little improvement; still weak, nervous, sleepless, and troubled with his heart; swelling in limbs passed off except in ankles; went to Texas for change of climate, result same; went to Hot Springs, Arkansas, and was treated for seven weeks; grew worse all the time; was then sent to the writer, who, upon

examination, found him suffering intensely and daily with headaches, backaches, difficulty in breathing, insomnia, and very nervous and restless; pulse 110-115, very weak; blood 70—acetonaemia, mentally dull, and loss of memory very marked; extremely constipated; felt numbness all below waist and tingling sensations in calves of legs and in his feet; pain over the hip on left side, and in back of neck; tingling in tips of fingers, more noticeable on right than on left side; feels like needles sticking in hands. Physical examination revealed ulceration at neck of bladder and swollen prostate; three overticula, and sigmoiditis. Treatments were given to relieve the local conditions described, and improvement was marked. Discharged three months later, sound and well, and has remained so ever since.

Case 31. W. A. G., age 48; married; three children; negative history; no hereditary tendencies.

Up to twenty-fourth year in comparatively good health. Then began declining, alternating with periods of recuperation. He began having a hacking cough, with little or no expectoration at first. This continued gradually to grow worse until, in his forty-second year, it became quite aggravated. At that time he began voiding urine very frequently, which his physician claimed was caused by "uric-acid diathesis," and began dosing him with alkalies; some temporary relief. Two years afterwards he began growing worse, until his urine "stopped on him." Catheter was used for several weeks. Two physicians had examined him by that time, and pronounced his trouble due to tuberculosis of the prostate, and he was treated by means of serum injections for its relief. His condition gradually grew worse until he was sent to the writer by one of the attending physicians.

Physical examination revealed parenchymatous, swollen inflammation of the prostate and neck of bladder, with slight rectal complications. The urine was loaded with alkalies, phosphates, and was of an extremely irritating character with ammoniacal odor. This kind of urine is always exceedingly irritating. Relief of the local prostatic trouble relieved all the other symptoms with which he was suffering. On the subsidence of the acute inflammation of the prostate, the vesical neck, and bladder, on alternate days, there passed from the pelvis of the kidney three ounces of a whitish granular mass that precipitated to the bottom of the urine. At times there were four to five ounces of this whitish urine voided. On the next day or the second day thereafter, the urine would again clear up and be almost entirely normal. It has puzzled many physicians to know, not only the nature of this condition of the urine, but the source from which this whitish or (often) grayish white mass would come. It puzzled the writer for a long time, until he finally demonstrated beyond question the source of it. It is generally very irritative, and patients speak of it as "burning almost like fire," when voided.

Marked relief from the cough, which had by this time become so excessive that his chest was extremely sore and painful; although expectorating but very little. He suffered at times with indigestion. Having some symptoms of tape-worm, I gave him treatment therefor, when he passed one twenty-four feet in length. Immediate relief of his cough ensued. His indigestion was entirely relieved, and he was restored to permanent health.

Case 32. B. K. J. is a very interesting case, as well as an instructive one, because of his age, of the many serious troubles from which he has suffered, and the remark-

able recuperative power which has enabled him to withstand the various pathologic lesions that have existed for so many years, notwithstanding the various efforts of physicians to relieve them. Aged 82. Forty years ago he was treated for tuberculosis, having hemorrhages. He rallied from this, and was next treated for "Bright's disease," then for chronic enlarged prostatitis, next for true hypertrophy, and finally for interstitial nephritis, or "Bright's disease" as a positive diagnosis, on account of puffy swellings under the eyes, weak heart, extreme prostration upon walking, and copious flow of urine. Twenty-five years ago he was operated upon in the rectum, having the "American operation" as it was termed, performed. Thereafter he was never free from extreme constipation, necessitating the taking of medicine or using enemas all the time. The result of the operation was shortening of the tunics of the rectum, causing a constant irritation and dragging sensation therein, from which he was never entirely free.

Examination revealed parenchymatous enlargement of the prostate, cystitis and vesiculitis. These were allayed in rapid succession, the puffiness under the eyes disappearing, strength improving, and he was able to retain urine seven hours.

Examination revealed "py-ro-sak," which was removed, and since then he has never had to take another dose of medicine for the evacuation of his bowels. As it now stands this man is good for ten years more, unless some unforeseen circumstance should arise; as he is as near in a normal condition, with reference to all vegetative organs, as any man of his age that I have ever seen.

Case 33. J. B., age 81, married; several children; negative history. For fifty years he was a traveling salesman, then discontinued. Twenty-five years ago

operated upon by the "American operation." He had suffered a sensation of drawing, as though of shortness of the lining membrane, as the former case, but not so marked. This gentleman was slightly constipated. Operation for overticula removed him entirely of his constipation; he has not had any trouble of this kind since. He suffered slightly from sigmoiditis, but it yielded readily to treatment, notwithstanding his age. His heart's action greatly improved after this operation, and he has prospects of an extended old age of fifteen or twenty years, regardless of the fact that the rectum and prostate had each suffered the ill-effects of bad practice; the latter especially, from treatment by a copper electrode, setting up prostatitis, and considerable purulent discharge, as well as frequent micturition. The case yielded remarkably well, considering the age of the patient; he has been dismissed practically well, or as much so as a man of his age could expect, and walks with the elastic step of a boy.

Case 34. L. W. L. From Pennsylvania; age 53 years; railroad man; married, one child; mother died of kidney trouble; father of dropsy at advanced age, having had diabetes for fifteen years before his death; had gonorrhea at 21 years of age; ten years ago stomach began troubling him, and constipation followed; then marked indigestion ensued and he could not take any but liquid food with any degree of impunity, and even this was attended with marked accumulation of gas in stomach and bowels; large doses of saline cathartics and purgatives required to give operation of bowels; finally began the use of glycerine suppositories, one to five daily, causing considerable irritation of prostate and bladder; up through the night at least five times to void urine, and much oftener during the day; eight years ago

began to lose the use of lower limbs, especially on left side; would drag left leg, and in going up stairs unable to raise same. Two physicians diagnosed trouble as "locomotor ataxia," and he had been treated therefor ever since, gradually growing worse. Both limbs swollen from knees down. Stinging, burning, itching sensation on inside of left leg, requiring intense rubbing to allay; had retention of urine twice, and always hard to start; constant residual urine of from six to eight ounces; excessive urea, trace of albumen and sugar; urine alkaline, hyaline and colloid casts.

Physical examination revealed ulcerated surface throughout prostatic urethra, and also three inches inside of bladder. All around the neck of the bladder and in the prostatic urethra there was a considerable quantity of proud flesh or vegetative growths almost occluding the canal, bleeding freely upon touching with instrument; devoid of acute sensation; gland slightly swollen. Two overticulas were removed. Sigmoid ulcerated throughout with marked diminution of lumen. Remedies were directed towards allaying of acute sensation, then removal of proud flesh in urethra and bladder, when urine again passed more naturally with less residual urine within the first two weeks; treatment continued, avoiding the exciting of acute irritation at any time. At the expiration of six weeks he was enabled to eat much better, with less disturbance in digestion. After two months returned home, where he remained for six weeks, improved very much. A letter stated, "I have improved more since returning home than while under treatment, yet, for the last two weeks I feel that I have about been at a standstill, or slowly receding to my former condition. Must I return?" He returned and remained six weeks.

He had gained up to this time ten pounds in weight, and had improved in general condition, and especially with reference to his defective power of locomotion, which had evidently arisen from sub-acute myelitis. He was also passing (on alternate days) a whitish, granular urine which was very irritating, and would as he claimed, "burn almost like fire." The next day, there would follow a straw colored, almost natural discharge. This is characteristic of pyelitis, and it was a long time before the writer ascertained the source of this whitish substance that precipitates at the bottom of a glass. Sometimes this may fill the vessel one-third or one-half. This whitish granular urine comes from the pelvis of the kidney . Certain remedies and treatment given in such cases (which will be subsequently thoroughly elucidated) caused cessation of the acute inflammation of the ureter and a relaxation of these organs, enabling this mass to pass from the pelvis down into the bladder. Many mistake this for "Bright's disease," or interstitial nephritis, but it rather indicates a continuation of the inflammation from the bladder up the ureter to the pelvis of the kidney.

This man remained six weeks longer, when he returned home a sound, healthy man—has remained so ever since, attending to all of his duties, and reports in perfect health.

Case 35. S. J. Age 47; married; no children; dark, swarthy complexion; thin, emaciated and tongue heavily coated; no appetite; extremely costive; temperate in habits; hard worker, having control of many men. Up to nine years previous hereto was in perfect health; trouble began with indigestion and accumulation of gases, stomach and bowels both distended after meals; this continued until he was forced to consult a physician,

who treated him first with digestive, then laxative remedies until two or three quarts of strong mineral waters were required to produce defecation, which would pass in the form of small lumps, attended with considerable quantities of thin, watery fluids; the passage being mainly of liquid nature. Physical examination revealed slight prostatic enlargement with occasional frequency in voiding urine, but with no particular pain, although the patient noted that it had become more difficult to start the flow and evacuate the bladder. On examination his rectum was found to be extremely flaccid, and devoid of acute sensation and filled with a semi-liquid mass of fecal matter. The sigmoid flexure was so tightly closed by stricture that the largest instrument that could be passed was about the size of a No. 12 bougie. It was also ulcerated and a thick muco-purulent mass was being constantly exuded from the bowel. The patient himself could easily detect the passage of the bougie through the strictured sigmoid. He had been thoroughly impressed with the idea that all that was necessary to get relief was to find some physician who could give him some special remedy suitable to his case; and thoroughly imbued with this idea he had changed from one doctor and treatment to another, during all the nine years, remaining from six to twelve months with each, saying that he had been anxious to try all the different "pathies" in his effort to find the special remedy. The last had been an osteopath, who benefited him physically more than any others, yet gave no relief to his typhlitis, indigestion and constipation. Twenty years prior to taking this treatment he had been ruptured, and had been treated by a process that had closed the opening, and he had gone without a truss for more than ten years, but the rather violent manipulations of

the osteopath had again ruptured him, which was the most objectionable feature of this treatment. After having been the rounds with the "pathies" he was on the verge of consulting a Christian Scientist when he met a railroad man whom the writer had cured of a similar trouble some two years before, and who induced him to consult me.

Treatment of this case was begun by local applications of a mild nature with cataphoresis to the sigmoid. Relief followed very slowly, but he was persistent in continuing from month to month. He was so improved after six months that he was no longer obliged to use purgatives. Treatment was continued for twelve months, stopping for short intervals, when, as he himself says, he was entirely restored, and feels as strong and well as at any time in his life.

After this man had discontinued all treatment for a year, he returned, stating that he had another trouble about which he wanted to consult me. He had no trouble with his bowels; they were moving regularly, his digestion was perfect, and the only symptom now was that when he awoke in the morning he felt as though he was completely exhausted, and that he absolutely had had no rest. He ate well, he slept all night, retired early, and he could not understand why his sleep was followed by depression. Examination revealed a "py-ro-sak" very high up, which, being removed, relieved instantly all of his disturbance at night, and he had perfectly normal sleep. This condition continued for four months, when he returned stating, "I am sure there is another one of those things, as I am getting back into the same state that I was when you removed that last one." I removed a second, then a third; and he is now completely relieved of every symptom of abnormal condition.

Case 36. Age 51; married; chronic glandular prostatitis, cystitis, vesiculitis, gonorrheal metastasis. Contracted gonorrhea at the age of 26, which lasted six months, and was followed by acute prostatitis, urethritis, cystitis. He suffered with periodical exacerbations for three years, subsiding in a form of gleet, from which he occasionally had a slight discharge, or gluing together of the meatus. There were no marked indications of prostatitis, inflammation of the bladder, or any other trouble, until his forty-fifth year, when he began having attacks of what he called rheumatism, in his shoulders and back of neck, and occasionally in his back. There was an impairment of his left limb, by way of a heaviness, which necessitated a dragging of this limb, and he was unable to lift it as easily as the other. Some days it would be better, other days worse. Otherwise, health good. He was an active business man. Two years prior hereto he began to have excessive pains in back of neck and shoulders, extending to his fingers. Occasionally there would be a tingling sensation down the arm to the fingers, and he was unable to hold a pen to write. He noticed, about this time, too, that he was unable to shave himself. The pain grew so intense in back of neck that he could not sit in a barber's chair, with any degree of comfort, to be shaven. His digestion was good, bowels regular, weight normal, and usually slept well. He had been treated by some of the best physicians, with various kinds of medication, including the different preparations of coal tar, salicylates, etc. He had been treated by a nerve specialist, who applied electric currents to his spine, limbs and arms. At times this was followed with temporary relief; yet each month, for a year, he had noticed he was worse than the previous one.

An examination revealed cystitis, prostatitis and vesiculitis of chronic nature. The gland was somewhat enlarged—swollen—from long standing low grade of inflammation. There was no acute tenderness of the parts, but a cellular infiltration of the rectal-mucosa in the region of the prostate and vesicles.

Chemical and microscopical examination of the urine and prostatic secretions revealed epithelial cells of squamous and columnar variety; also debris of cocci, which indicated additional involvement of the bladder, prostate and seminal vesicles.

At this time, too, there began passing considerable masses of brownish white admixture from the pelvis of the kidney. This mass appeared on alternate days at first; then on the fourth or fifth day, until finally it disappeared altogether. I did not see him again for six months, when he reported that he had in the interval been quite well and had not had any symptoms of his trouble.

Four years thereafter he again consulted me, stating, "As you cured me of my former trouble, I would now like you to cure another trouble that has been greatly annoying me. I began having paroxysms of fever about a month ago. At first they would begin about 4 P. M., and last two or three hours. They would leave me somewhat depressed, but I would be able to attend to business the following day. These attacks continued to grow in severity, and fever became so excessive as to reach 103 late in the afternoon, and I also suffered with pain in the left side. This would gradually wear off during the night, as defervesence occurred. From day to day the fever and pain continued to grow in severity until it was continuous. It was less in the morning than in the afternoon but would never entirely subside."

Physical examination revealed ulceration and stricture of the sigmoid-flexure. He was also troubled with constipation and voiding of lumpy, hard, fecal matter. Improvement in this case was slow and long drawn out. It was about two months before the fever entirely disappeared, and the pain was relieved; but he continued the treatment at irregular intervals for over twelve months before he was finally discharged cured. Since then he has had no recurrence of any symptoms.

Case 37. Married; age 56; chronic glandular prostatitis and vegetative growth at neck of bladder; profuse hemorrhage of bladder. This man had been suffering with frequency of voiding urine for three years prior to seeing me. It first came on in a mild form, with occasional exacerbations. Finally, he consulted a physician, who was very prominent, highly educated, and thoroughly well up in his business, except in the treatment of this special trouble. The patient began using sounds, gradually enlarging them until he reached 26 F. The patient seemed to improve some after the acute symptoms had been allayed by this treatment. On November 4, after having used the sound, he noticed that he was passing blood. He went to see his physician, and found that the bladder was practically filled with blood. The physician tried to stop it by astringent irrigations, but was unable to control the hemorrhage, and the patient was sent to me for treatment. On his arriving, I found the bladder distended and filled with clotted blood. The patient was very pale and very weak from the effect of the loss of so much blood. I immediately evacuated the bladder, taking two hours to accomplish it. During this time there was constant hemorrhage, which necessitated my entering the bladder with a cystoscope to ascertain the source. I found a vegetative growth at-

tached immediately to the back of the prostate. This was bleeding very profusely. The hemorrhage was controlled for the time being, and he was given remedies to use at his home. He left and was gone four months with little or no trouble from his ailment; he again returned, having a slight hemorrhage. Cystoscopic examination revealed another vegetative growth, attached to the prostate by the side of the pedicle of the first growth. After the hemorrhage was again controlled, he again left for home in good condition, having been given a remedy to use himself, in controlling any hemorrhage that might eventuate. He was finally relieved altogether.

There is no question in the world but that the man would have died from hemorrhage had it not been controlled in the manner described; and the only other method whereby the hemorrhage could have been controlled would have been a serious operation that would most probably have cost the man his life.

Case 38. Age 30; married; chronic glandular prostatitis, cystitis, abscess of prostate, metastasis, etc. At the age of 20 contracted gonorrhea, which lasted eight months, during which time the inflammation was excessive. He was treated both locally and constitutionally. This was followed by gleet, which was continuous for two years, when he had a second attack of acute gonorrhea. This latter lasted about eighteen months. The inflammatory condition was exceedingly severe, and was followed by gonorrheal rheumatism, cystitis, chronic inflammation of the prostatic urethra, prostatitis, and an abscess, rupturing into the prostatic urethra. The inflammatory condition extended from the meatus to the neck of the bladder. Besides various local applications to the urethra, and constitutional remedies, he was

operated upon at three different times, two of which left fistulous openings; one at one-half inch and second at an inch from the glans. Subsequently a perineal operation was made for drainage, of eight weeks' duration, with a view of closing the fistula. This was a failure, and the openings remained patulous. Two years later, the old perineal incisions opened, and for a few weeks he suffered with an acute attack of prostatic urethritis, prostatitis, vesiculitis, cystitis. In fact, every pelvic organ of the patient was involved with profuse discharge through the perineal opening and the urethra. Fistulous openings existed through the urethra and bladder. This discharge resisted all local and constitutional treatments by the best physicians of Indianapolis and New York for three or four years, until he fell into my hands on the 26th day of February, 1905. A full account of this case, detailing the treatment for several years, will be given in the supplementary volume on TREATMENT. Normal conditions were finally obtained in the bladder, prostate and urethra. The symptoms were often aggravated by bouts of drinking. So complicated was this case both by lesion of adjacent organs, and so similar are other cases, that a detailed account of the treatments will be of unusual interest.

CASE 39. K. E., age 42; Tiffin, Ohio. He had suffered with local irritation for three years. Many physicians in his town had treated him for enlarged prostate, stone in bladder, and other troubles. He was about to be persuaded to have the gland removed, as he had been suffering intensely for the past month, having violent chills and rigors almost daily, followed with high fevers. Dr. L. A. Kellar directed him to come to me. I found a calculus three-quarters of an inch long, and one inch in circumference, in the prostatic urethra. After many

efforts this was dislodged, but it was too large to escape through the meatus, which was opened and it was removed.

This man suffered from toxic uremia for two years previous to consulting me, also from vaso-motor disturbances superinduced by urethral and prostatic inflammation, and glandular enlargement of the prostate. The bladder, too, was involved; although there were no stones found therein. The calculus referred to had begun forming within the prostatic gland, and the accretions to the calculus had continued until it had passed through the prostatic duct to the prostatic urethra, in which it became lodged. Recovery was prompt after the removal of the calculus; and he returned home, after being under treatment three weeks. He was feeling well; and the last report from him is that he was perfectly healthy and attending to his business daily.

Case 40. J. H., age 75; strong, healthy man all his life. Began suffering three years before with prostatic trouble and inability to void urine. Catheter was used, which was followed by an acute attack. On the subsidence of this, he remained apparently comfortable for two years, then a recurrence more severe than the previous attack ensued. The most prominent symptom was his difficulty in breathing, and (as he illustrated it) he seemed to choke up on each side of the neck just above the collar bone, along the course of the pneumogastric nerve. The first treatment after examination of the prostate completely relieved this difficulty of breathing and choking sensation, which at times had been so severe that it necessitated his grasping a beam, a tree, or a house to support himself until this blind choking-up sensation would pass off. The marked relief afforded this man by the first treatment of the prostate gland

cleared up the diagnosis at once. Although he had one or two mild attacks of difficulty of breathing afterwards, he never suffered any distress. Before he underwent treatment he had an extremely flushed and congested face. This, too, had subsided to a great extent. He had symptoms of sciatica, and had had one or two attacks of the same disease, which fact induced the writer to examine the rectum, when a "py-ro-sak" was located, but not relieved. Irritation of this "py-ro-sak" induced by the examination precipitated acute irritation of the sciatic nerve and left limb, making it very difficult for him to move about. He had been treated by his son, an osteopathic practitioner, several weeks before coming to me; at first with negative results. This son came to visit him, and was evidently nettled at seeing the improvement in his father, resulting from my treatment —when he himself had made no improvement. He, therefore, persuaded his father that the trouble with his limb was due to my treatment; and he carried him off, which, in my opinion, will cost the man his life, as I believe as firmly as I exist, that he could have been cured just as all the others had been by relief of the "py-ro-sak" that I had located. The osteopathic son never could locate or relieve it, and it will exist until it kills the patient.

CHAPTER VI.

Senile Hypertrophy and Its Complications with Cystitis, Vesiculitis, the Rectum, Etc.

True hypertrophy of the prostate consists chiefly in indurated enlargement, as an outgrowth of the muscular fibers of the gland. The pressure exerted by this adventitious growth upon the blood vessels and gland tissue perverts their function, nad ultimately induces parenchymatous inflammation of the entire gland, and adjoining structures. This form of disease is characteristic of middle or old age. It rarely occurs in men under forty-five, and more frequently after having passed sixty. Sir Henry Thompson places the time of life at which it most frequently occurs at from fifty-five up to seventy, but says that it rarely develops after seventy. Dr. Keyes places the time of its usual appearance after fifty. It must not be inferred, however, that in all men past forty-five, who suffer with prostatic disease, it is senile hypertrophy; on the contrary, more men suffer from glandular enlargement, during that period of life, than from a hypertrophic induration of the gland. The proportion is about one hundred glandular to one of true hypertrophy. It is fortunate that such a proportion exists, as the glandular form is the more easily cured—in fact ninety-five per cent. of these latter cases are curable, and all can be materially benefited. The hypertrophied condition is much more obstinate, and more difficult to relieve. The author until recently considered the large majority of these latter cases incurable, but

recently improved instruments and remedies rendered them much more amenable to treatment.

While this disease is characteristic of old age, yet exceptional cases occur at a much earlier period of life. It is quite common among physicians to ascribe all forms of diseases of the prostate to hypertrophy, and place the time of its occurrence anywhere from twenty-one up.

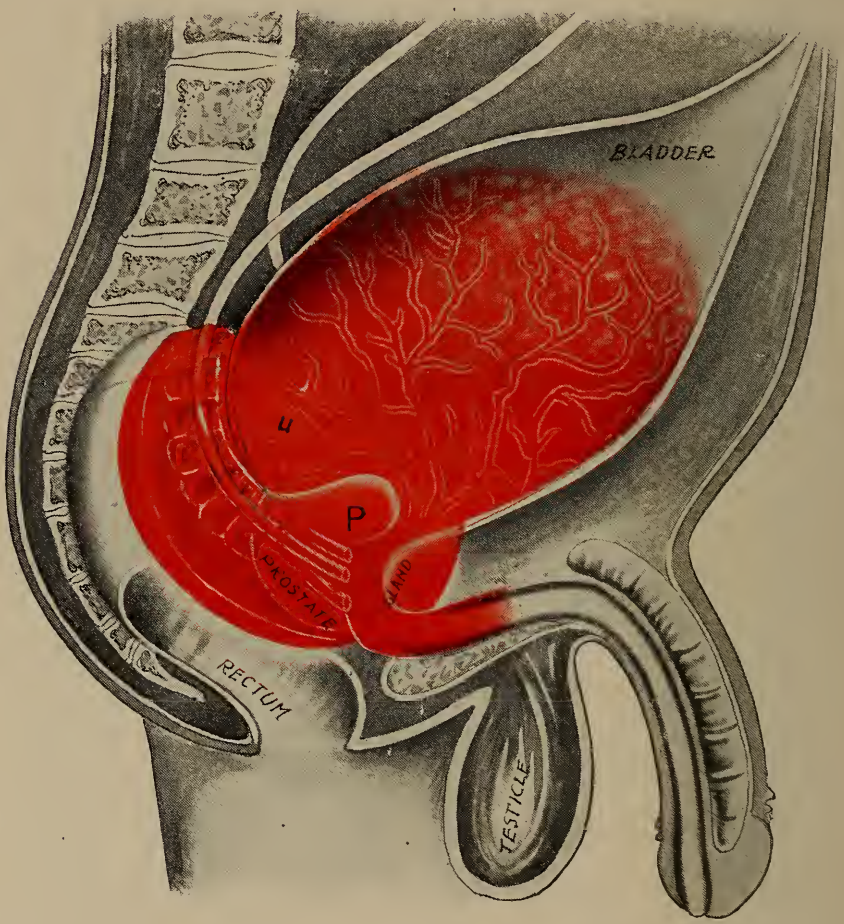

FIGURE XX.

In fact many chronic urethral diseases that have proven rebellious to the ordinary methods of treatment have been pronounced hypertrophy, cancer or tuberculosis. It might be likened to Fothergill's interpretation of rheumatism, which, as he states, "includes anything from the lightning pains of locomotor ataxia to the boring sensations of syphilitic ostitis."

Figure XX gives a lateral view of the condition of true hypertrophy. By referring to this illustration, one will note P enlargement of third lobe. It shows, too, its encroachment upon the caliber of the urethra, closing it almost entirely.

The more the urine accumulates, the stronger it presses this abnormal third lobe down like a valve, preventing the outflow of urine. It may be observed that by means of a catheter this can be pushed aside, and the catheter permitted to enter the bladder and evacuate the urine without trouble, yet immediately upon its withdrawal, the lobe P falls back in former position, obstructing the outflow.

Clinical results of many cases of senile hypertrophy (see Figure XX) prove that the large majority of the cases suffering with this trouble have as the most prominent subjective symptom an obstructed flow of urine resulting from an abnormal enlargement of the third lobe. The opinion generally held by physicians is that senile hypertrophy is an enlargement of the two normal lateral lobes of the gland.

The writer has recently devised special means and methods by which he is enabled to remove the abnormal growth with impunity, oftentimes without necessitating the man stopping work.

I wish to impress upon my readers that this condition of the gland, especially at first, is not attended with

the acute symptoms, such as a frequent desire to void urine, or the presence of pain. The chief subjective symptom is usually the obstructed flow, without the usual concomitant symptoms that attend the enlarged, congested glandular disease of this organ.

The latter condition invariably results from ulceration of the prostatic urethra, while true hypertrophy supervenes upon glandular enlargement or some other cause.

Clinical experience has demonstrated that the large majority of men troubled with prostatitis and enlargement of the gland, even when past seventy-five, do not suffer from hypertrophy of the gland, but from glandular enlargement. I have treated and cured many men past eighty suffering from the latter, that had been treated for senile hypertrophy and pronounced incurable. Such errors have not been confined to the general practitioner, but many had been treated by some of the leading genito-urinary specialists of the world.

Causes.—The etiology of the disease has never been definitely determined. Several of the French writers have considered it analogous to the atheromatous condition of the blood vessels, heart and other structures of the body, due to old age, resulting from undue accumulation of the earthy salts from the impaired functions of the eliminative organs. The various hypotheses as advanced by different writers upon the subject are wholly speculative. It cannot be due to over use of the organs, congestion, or inflammation of the gland of long standing, though the latter evidently tends in some instances to convert soft infiltration, as a result of such inflammation, into firm fibrinous structure; yet I have known of numerous men who suffered more or less with prostatitis for twenty-five or thirty years, that were free from fibrinous induration of the gland. Dr. Keyes

says: "The prostate is analogous to the uterus in the female, in regard to the nature of the muscular tissue, which composes it, and this analogy is further borne out by the tendency of both organs to develop fibrous tumors (so called) after middle life."

The morbific changes that take place are not uniform, as in congested enlargement of the gland, but are usually nodular, or one lobe may be affected, independently of the other. The fibrinous band at the neck of the bladder is almost invarably involved, sooner or later, forming a firm bar which serves to obstruct the flow of urine. This brings about various congested and inflammatory conditions of the bladder, the prostate and adjacent organs. Later this bar may develop to such an extent as to cause retention of a part or practically the whole of the urine, which undergoes decomposition, inducing thereby local irritation of the bladder, all the acute conditions and symptoms characteristic of glandular enlargement, and in addition calculi, or sepsis. Subsequently, as the induration increases, it presses upon the vessels and gland structure until congestive inflammation and all attending symptoms demand immediate relief.

The greater the accumulation of urine the more firmly is this bar "P" pressed against the opposite wall of the vesical neck, acting as a valve and preventing any outflow of urine. The catheter can be inserted with ease and often with impunity into the bladder, pushing back this valve-like protuberance. At other times considerable difficulty is experienced in passing this instrument properly, enabling it to turn upward and take the course of the changed canal. Special catheters are now made for this particular purpose—to make the curve properly and to prevent the instrument from passing directly through the obstructed bar.

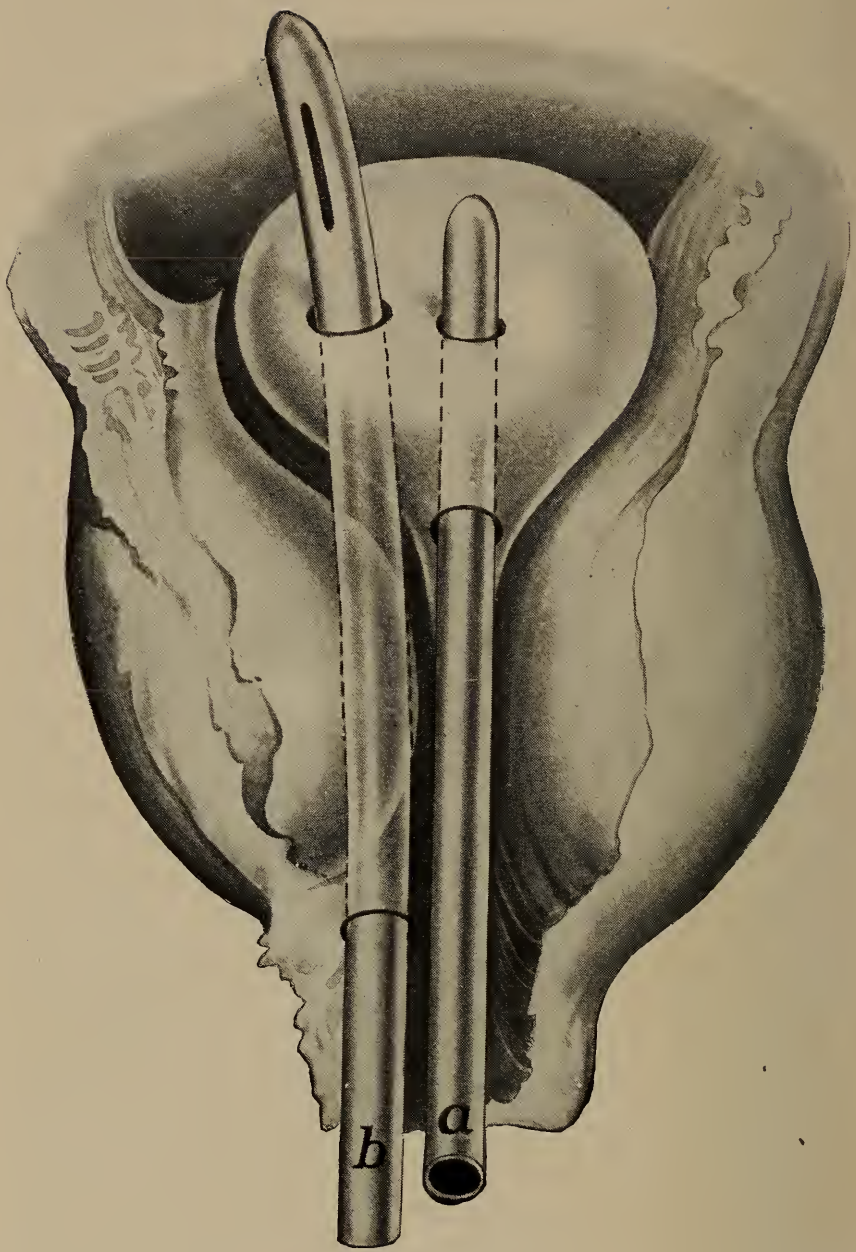

FIGURE XXI (Guterback).

Figure XXI illustrates the passing of a catheter through this bar—if the operator had had the proper instrument and knew how to use it, the condition seen in the illustration would have been prevented. Catheters made of silver or other metal, and sounds, are often forced through this bar. (b) illustrates the passage of the same catheter through the same obstructed bar, showing it entering the utricle in the prostatic urethra. The utricle often becomes distended, and admits the catheter, which is engaged more frequently at that point than at any other point in the urethra.

False passages as illustrated by the above figure are extremely common, and the operator must specially avoid using force with *any* instrument when it reaches the deep urethra, as the prostatic urethra and adjacent parts become so soft and pliable from long standing congestion and inflammation that they easily break down and permit the passage of *any* instrument, even a small catheter, through their tissues.

The abundant anastomosis of the veins of the prostate and bladder, with the hemorrhoidal, causes venous stasis in the rectal mucosa resulting in the formation of hemorrhoidal tumors, ulceration, or any organic lesion within the rectum.

Symptoms. The symptoms must necessarily vary with the extent, condition and stage of the disease, and most of them are similar to those of congested glandular enlargement of the gland as heretofore described, with the exceptions pointed out. The enlarged gland often presses upon the rectum and interferes with the free evacuation of the bowels, causing constipation, and often flattening of the fecal matter, as it passes the obstruction. It is also somewhat difficult to start the flow of urine, at times, or to thoroughly evacuate the bladder. The

residual urine may dribble away, after cessation of the flow, onto the clothing, to the great annoyance of the man. The amount of the residual urine is in direct proportion to the size of the abnormal fibrinous band.

Pressure upon the nerves of the prostatic, hypogastric and sacral plexuses provokes various reflex disturbances. Prominent among these are pains in the back, hips and limbs, disturbance of the stomach (which is a very common sequel of any form of prostatic disease).

The bladder often becomes largely distended, from an over-accumulation of urine, impairing the detrusor urinae to the extent that they are unable to expel all the urine. This residuum increases as the disease progresses, and becomes offensive from the decomposition of mucus and urea. Bacteria develop in large numbers, and the patient is in constant danger of septic poison. Sepsis is especially liable to a catheter habit, inasmuch as the microbic flora, always present about the meatus or fossa navicularis, are carried by the catheter into the bladder where conditions are so favorable for their development and engendering of septic poison, as clinical investigation has proven, that it has been impossible to maintain an antiseptic urethra.

The catheter life of a patient has been estimated at an average of from four to five years. Sir Reginald Harrison gives this as the average time. There are exceptional cases on record, where men have lived fifteen or twenty years using the catheter several times during the twenty-four hours.

Diagnosis. The disease, for which hypertrophied prostate is most likely to be mistaken, is congested glandular enlargement of the gland, as before described; and, it is not easy, in many instances, to differentiate between them, since each occurs during the same period of life,

and many of the subjective symptoms and complications are similar.

In the early stage of hypertrophy the diagnosis may be more easily made. In this stage the gland is much less sensitive, unless it has been subjected to harsh treatment by sounds, caustic applications or other procedures, when acute inflammation may have been the result thereof instead of the disease, *per se*.

Even in glandular enlargement, which is often mistaken for hypertrophy, the acute congested condition of this gland causes such tension upon the capsule surrounding the gland that it becomes so hard and tense that the condition is often mistaken for true indurated hypertrophy.

By digital examination per rectum the gland, in true hypertrophy, is found to be unsymmetrical, and is somewhat nodulated and irregular in outline. This latter condition also exists in tuberculous enlargement, yet this occurs so very rarely that it may not be considered as an important diagnostic point unless there exists constitutional indications of tuberculosis.

Figure XXII. This illustration is of special interest, showing very marked enlargement of the middle lobe and hypertrophic growth of the lobe, causing atrophy of the verumontanum and a perverted condition of this important structure. It also shows an indurated, corrugated, condition of the bladder wall. There is also a small concretion attached to the upper portion of the middle lobe.

In hypertrophic conditions of the gland the two lobes are not symmetrical; one lobe may be nodulated from the pressure of tumors, and the other not be affected. Both lobes of the gland are rarely of the same size and consistency, and there is little or no tenderness upon

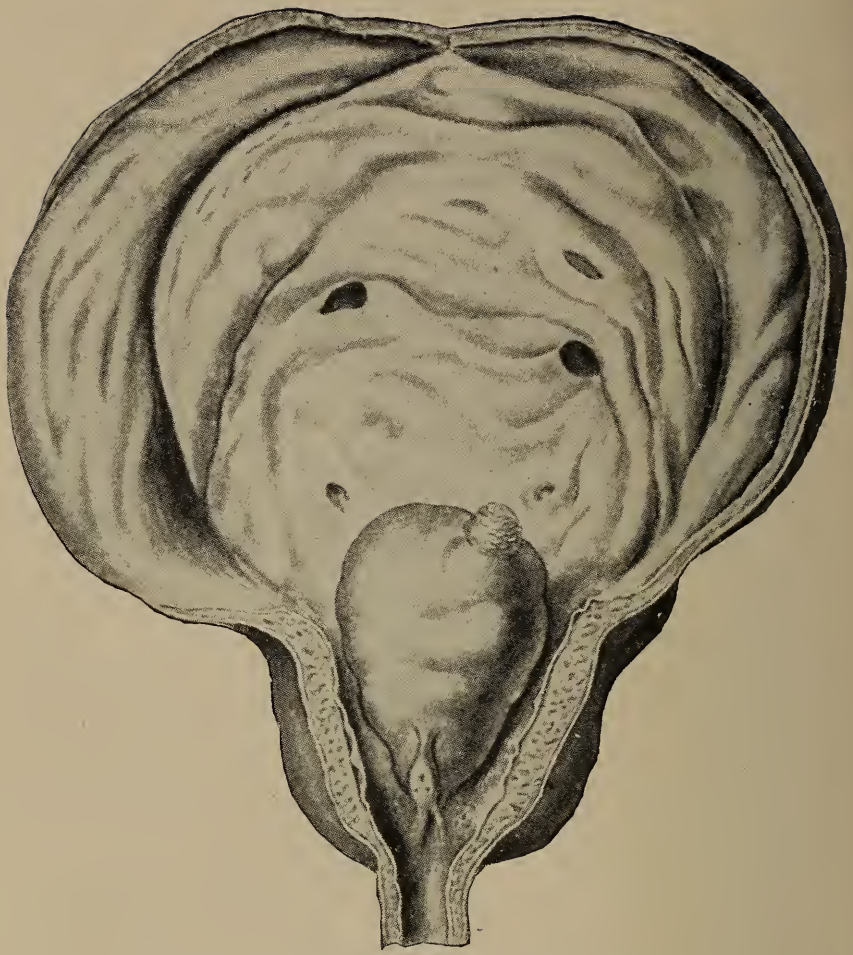

FIGURE XXII (After Cruveilhier).

pressure, unless inflammation has extended to the gland from complications of the bladder or rectum, or the extreme size of the organ has obstructed the flow of urine and caused a congested inflammatory state of its glandular structure and bladder. When such condition exists, there is often a profuse discharge both from the gland and vesicles.

In enlargement from glandular congestion the lobes of the prostate are uniform in size, less firm, unless it is

very much swollen and the capsule is subjected to extreme tension. It is also tender upon pressure; the tenderness extending to the glans penis or perineum.

The hypertrophied, indurated and contracted bladder often becomes sacculated as a result of some of the detrusor urinae becoming partially paralyzed from overdistension. The urine often deposits or precipitates within these sacs, and remains without being expelled for a long while. In such conditions there often develops calcareous matter, at times forming the nucleus or even causing the development of stones of such size as to be easily detected by the cystoscope, when they are not covered with folds of the muscular walls of the bladder. In the majority of instances, where calculi have become imbedded within these sacs, distension by air of the walls of the bladder reveals them through the cystoscope.

Another valuable diagnostic point is that the prostatic urethra is invariably elongated, when a third lobe has developed. This elongation can be easily detected by means of a thin, flexible bougie. Pass the bougie through the urethra, noting carefully the resistance as it passes through the prostatic urethra and through the elongated part (induced by the abnormal third lobe). Note the distance the instrument has passed over before it enters the bladder (which is indicated by the absence of resistance when it leaves the third lobe).

Carefully withdraw the instrument (first noticing or marking a point on the bougie close to the meatus), and measure from this point to the terminal extremity of the instrument.

By this means the distance from the triangular ligament to the entrance into the bladder may be ascertained. Normally this should be one and one-quarter

to one and one-half inches; when hypertrophy is present the distance is two and one-half to three inches.

In order to accurately determine the length of the canal as induced by this indurated enlargement (third lobe) one should stretch the penis to its full extent, then compare the length of the urethra thus ascertained with that of the normal urethra as determined by the individual case. Some men naturally have an urethra nine inches long—but this point must be determined by the length of the urethra from the meatus to the prostate or (more properly) to the triangular ligament.

This is one of the easiest diagnostic points by which to differentiate between glandular enlargement of the prostate and true indurated hypertrophy. I dwell on this to some extent as it is very important for one to know whether the case is curable by means of the remedies and instructions devised for glandular enlargement.

"The differential diagnoses with reference to these two diseases of the gland are very important, inasmuch as one condition is curable and the other is not, and the curable one is so often mistaken for the other, and the patient subjected to dangerous and useless operations, that are irreparable." The foregoing statement was made ten years ago in the first edition of my book. Since that time the author has been enabled to cure the majority of those diseases that were at that time considered practically incurable. New instruments and remedies have been devised, by means of which this third indurated enlarged lobe can be removed, and the fibrinous element of development arrested; so that thereafter the man passes urine practically normal, and with as little or even less trouble than most men of his age who do not suffer from such trouble.

My present methods are fully explained and illustrated in the supplementary volume to this work. The medicinal agent and the instruments are fully described, and their applications in the different stages of various lesions and diseases thoroughly elucidated. Any intelligent physician should by following the directions given be able to cure the diseases dealt with, instead of inflicting upon his patient dangerous and senseless operations, as, for instance removal of the gland.

Treatment. Hypertrophic prostatic diseases, owing to their intractability and the involvement of adjacent organs, have been made by ambitious surgeons the object of many operative procedures, each of which challenged his predecessor in the endless suffering entailed upon its victims, or in lethal dangers, and supplying a topic for lengthy discourses and discussions in medical societies upon the superior claim of each operation. I may refer to the instance mentioned in a succeeding page, of a country doctor who reported that he had performed twenty-six such cases "without failure." Notwithstanding this claim, during the discussion which followed he acknowledged, "as to the results . . . I expect the next set will all die."

The treatment which was generally advised in such cases in the past was the removal of the gland together with the adjacent structures. As a matter of fact, the removal of the gland alone without the removal of the adventitious arbnormal structures, would not serve the desired purpose, as these latter would obstruct the flow of urine. In view of this fact, by simply noting the illustrations of the indurated, thickened condition of the walls of the bladder, and the abnormal condition of other structures, one can see at a glance that *all* the structures are prerequisite to a thorough evacuation of the bladder.

Removal of the parts involved would necessarily prove fatal.

Before proceeding to describe my method of treatment in cases of senile hypertrophy, I shall briefly refer to some aspects of the surgical operations by which a radical cure of the disease is attempted.

The prevalence of the disease has offered a tempting field for the exploitation of surgical ingenuity and the innumerable methods proposed, those of Tobin, Mercier, Bottini, Harrison, Dittell, McGill, Belfield, Treves, Whitehead, Dolbean and others, have one and all found enthusiastic followers and formed the subject of much medical literature.

Surgical operations for the relief of urinary troubles resulting from enlargement of the prostate fall into two classes. The first consists of the various methods by which the gland is attacked directly; the second embraces the procedures that aim at reduction of the blood supply of the swollen organ and consequently atrophy thereof.

Direct interference of the diseased organ is effected through the urethra (as in the Bottini operation), or by the perineal route (lateral prostatectomy), or by means of suprapubic incision. By the last method, the gland, especially the middle lobe, is removed bit by bit with the rongeur forceps, or a wedge is cut out with scissors, or the organ is destroyed by Paquelin's cautery or the galvano-cautery. Prostatectomy by combination of suprapubic and perineal methods has also its followers.

The operations undertaken for the purpose of reducing the blood supply of the gland and so bringing about an atrophied condition are either direct or indirect in character. The direct method consists in ligating the arteries which feed the prostate, *i. e.,* simultaneous ligation of both internal iliac arteries.

The indirect method is orchidectomy. The theory on which this latter procedure is based is, that the hyperemic condition of the genital system is diminished by the removal of the nervous reflexes which are induced by the congested inflammation of the prostate, which was superinduced by normal secretions of the testicles. The removal of the testicles was supposed to overcome the nervous reflexes induced through the prostatic ganglion and genito-spinal center. In turn this overcame the normal congestion of the gland that takes place during erotic excitement. The theory, however, proved disastrous in many respects; giving rise to serious troubles, such as insanity, suicides, etc.

This multiplicity of surgical methods of dealing with the hypertrophied prostate has its parallel in the variety of theories that have been propounded as to the cause of the disease, as for instance, that of Guyon, who regards it as simply a part of the constitutional condition peculiar to old age, and characterized by arterial sclerosis; or that of Harrison, who regards the growth as compensatory in character and secondary to certain bladder changes. Others believe that prolonged, ungratified sexual excitement causes enlargement of the prostate. But here we are met with the difficulty of distinguishing cause from effect, for there is plenty of evidence to show that the enlarged prostate is a cause of abnormal sexual excitability, in some cases, while in the majority it has the opposite effect of causing impairment or total impotency. In point of fact, the probable cause of many of these troubles (as evidenced by the age at which they usually appear) is similar to that which produces changes in women at the menopause, including the growth of fibrous tumors in the uterus. This change in men evidently brings about that tendency to change of

normal nervous condition, which precipitates fibrous developments in the prostate similar to those produced in the uterus of a woman.

In conclusion I will state that the various operations which have been commended and followed for varying periods have, like the Bottini, been attended with such serious, even fatal, results as to be one after another abandoned. Further reference to these matters will be made in the supplementary volume.

On account of the celebrity of Bottini's operation and to show the dangers which lurk in it, I will here say a word or two regarding it. Enrico Bottini's galvano-cautery radical operation for hypertrophy of the prostate was first performed in 1875. The instrument as used was catheter-shaped, of medium caliber, with short beak carrying a platinum plate (three-quarters inch in length) on a porcelain disc. The plate, rendered red-hot by electric current, was used to cauterize the prostate. In a short time this cauterizer was discarded for a prostatic incisor, the instrument consisting of a male and female arm. A platinum knife (five-eighths inch long) in the male arm leaves the female arm on working an outside screw, and a cooling mechanism prevents burning of the parts by any other portion of the instrument than the knife. The incisor was intended to remove the mechanical obstruction to the outflow of the urine by slowly burning a groove or grooves through the enlarged prostate. The operation, however, simply effected a splitting of the gland, which in a short time healed, and the parts again grew together. The condition after the operation was practically the same as before; besides, the patient was subjected to a dangerous operation, and the inaccessibility of the parts caused great difficulty in controlling the resulting hemorrhage by ordinary means. Even

after its improvement by Freudenberg the operation soon became obsolete.

Regarding the other surgical methods above referred to but little need be said here. Prostatectomy, whether by the suprapubic or perineal route, or by combination of these methods, is always accompanied by the danger of sepsis, hypostasis, and above all of uremia. This operation has become quite popular of late years.

I fully concur in the opinion expressed by Dr. Orville Horwitz, as published in the *Medical Times* of August, 1901. In summarizing the results of one hundred and sixty-one operations for the relief of senile hypertophy of the prostate, he says: "With the exception of ligation of the internal iliac arteries, prostatectomy is the most dangerous of any operation that has been recommended for the relief of prostatic obstruction, due to hypertrophy." Yet there are some newly-fledged surgeons who harp upon the operation being practically free from danger.

About thirty years ago prostatectomy was unquestionably a fad. Subsequent results led conservative surgeons to weigh well its many dangers as compared with the small number that were at all benefited. The unsatisfactory results obtained caused most of the prominent practitioners in the United States to abandon the operation as unsafe.

Professor E. L. Keyes, whom I regard as the most prominent genito-urinary specialist and author in the United States, if not in the world, had advocated its use, but now is amongst those who denounce the operation as pernicious. "A wise man changes his opinion; a fool, never."

In the last edition of Professor Keyes' book on Genito-Urinary Diseases, page 288, he says:

"Twenty years ago no one operated upon the hypertrophied prostate. Today every surgeon approaches this organ with a knife or a cautery in his mind if not in hand. The mass of literature on this subject is appalling. Everyone operates; everyone writes; everyone defends his own views in his own way; the result is that the variety of operations almost equals the number of operators. . . . On one point only do they all agree implicitly, if not explicitly, viz., the prostate may not be operated upon with impunity." In one of the latest works on surgery of the prostate, by John B. Deaver, page 12, after describing the operation (as claimed) of enucleation and removal of the prostate, the author says: "Many other surgeons have labored to prove that such an operation is not only surgically, but even anatomically impossible, assailing Mr. Freyer's claim of originality."

He continues: "It seems a pity that so many controversies in regard to surgical priority are so constantly arising, and it appears that prostatic surgery is particularly unfortunate in this respect. Riolanus bitterly denounces his contemporaries for claiming as their own, operations which had been employed before their grandfathers were born"; *and abandoned.*

During the last few years I have followed up every case upon whom prostatectomy had been performed, which has come under my personal observation, to note the immediate and ultimate result of this operation.

Case 1. Lived in Sioux City and was operated upon in Minnesota. He was reported by his friends as cured; three weeks thereafter they reported he was well. Six weeks after the operation he applied to the writer for relief of pain from which he suffered every five to fifteen minutes. His urine, which was of dark, muco-purulent

character was of the most offensive odor, and passed involuntarily into a urinal which extended down his leg to his ankle. Three months afterwards he had a stroke of paraplegia, and was rolled about in a chair, as he could not stand up on his feet. Nine months later he died very suddenly owing, it was said, to a "brain clot."

Case 2. Operated on in Chicago, died three days after the operation, from hemorrhage.

Case 3. Operated on in Minnesota. Was reported well at the expiration of the fourth week. He had to wear a urinal. Three months thereafter he reported that he had but little trouble. Six months afterwards he began having serious trouble in voiding urine, and stated that the urine was very dark in color, and offensive most of the time. Thirteen months afterwards he died from abscesses in the perineum, and sepsis.

Case 4 was reported to the writer by Dr. Murphy of Paducah, Ky., who stated that the man suffered horribly, from the day he was operated upon until he finally died from sepsis and abscesses in the perineum and adjacent structures.

Case 5. Operated on in St. Luke's Hospital, Chicago. He was a man of robust health, whose urine suddenly became obstructed during an acute attack of chronic enlarged prostatitis. Numerous efforts to evacuate the bladder failed. Twelve hours later he was carried to a hospital and prostatectomy was attempted. For about two hours a so-called prominent surgeon (on hospital staff) cut, gouged and punched, trying to enucleate the prostate *(sic)*. Finding the opening too small at first, it was enlarged. The opening still not being sufficiently patulous, it was again enlarged. After several attempts and failure to extricate the gland through this route, the surgeon abandoned this course, and tried the perineal

route. Becoming disgusted with the surgical *(sic)* procedure, Dr. Smith and I left the operating room. Dr. Chamberlin and Dr. Shannon, who were also present, remained to the end. I saw one of them the next day and asked what was the result. The reply was that the man died on the operating table after about two hours' attempt at removal of the gland, but he never did get it out.

Case 6 was that of a man forty-five years old, where the gland had been removed three months. During this time he suffered intensely, and there was continual dribbling, which necessitated his wearing a urinal. On introducing the catheter, there was no urine following its entrance into the bladder; but upon its withdrawal to eight inches, from one to two drams passed. He said that he thought he had suffered before the operation, but that it was nothing compared with the pain since. He left and nothing more has been heard of him.

(A), Figure XXIII, shows diagramatically the vacant space where the prostate gland has been removed. As the urethra passes from the bladder through the upper third of the gland (as the dotted lines indicate), and is connected directly with the two lobes of the gland by eight or ten prostatic and two ejaculatory ducts, it is evident to anyone familiar with the anatomy of the prostate, that it is surgically and anatomically impossible to remove this gland without removing also the urethra and the two sphincter urinæ muscles, whose province it is to retain the urine in the bladder. Their removal allows the urine, as fast as it is secreted and percolates through the ureters into the bladder, to pass on into this sinus (A). There is no obstruction to the passage of semen also into this same sinus. Here the urine and semen decompose and become septic; and under such conditions the formation of abscesses in the perineum is favored.

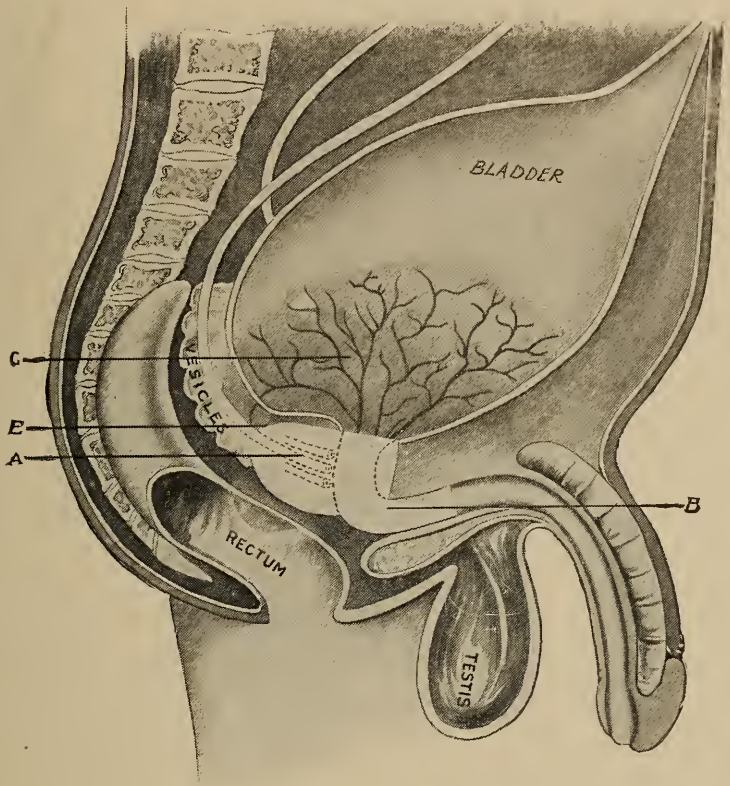

FIGURE XXIII.

Such being the case, one can appreciate the query of Dr. Johnson, of Arrowsmith, Ill., who wrote: "Dear Doctor: A Mr. K. of this place was operated upon for prostatectomy in the spring of 1909. I had to catheterize him yesterday, but failed to get any urine; yet, when the catheter was withdrawn, the urine began dribbling. Several other doctors have catheterized him, and no one has ever got urine from the bladder. Profuse hemorrhage followed one of these attempts. Please explain why there is no urine in the bladder."

The explanation is patent to anyone who has read the description of the operation—the sphincter muscles having been removed, there was no means of retaining the urine within the bladder.

Figure XXIII, (C) points to the inflamed portion of the bladder resulting from a chronic enlarged prostate. (E) is the border line between the sinus and the bladder; when it is necessary to use a catheter it is very difficult to find the urethral opening to the bladder.

In the case mentioned above, a stricture formed at (B), which made it difficult to evacuate even the sinus. This subject has lived longer in the condition described than any other that has come under the notice of the writer.

Enucleation of the prostate gland "is an impossible operation"—see page 13 of Deaver's late book on "Enlargement of the Prostate."

Figure XXIV illustrates diagramatically the prostate and the ejaculatory duct as it enters the urethra (b), passing through the prostate gland (p.p.p), the two lobes of the prostate being tunneled by the ejaculatory duct and urethra. The prostatic ducts are not shown in this illustration. The main points of interest in this cut are the two sphincter-urinae muscles, the internal and external (a, c) respectively. The points to be remembered in these illustrations are that in the removal of the prostate (as claimed) by enucleation, the operator must necessarily remove at the same time the two sphincter-urinae muscles, thereby removing the only means by which urine is retained within the bladder, or prevented from constantly escaping by dribbling through the sinus formed by the operation.

There are so many of these so-called "surgeons" (?) that report results and publish them in some medical journal after having read them to a medical society that

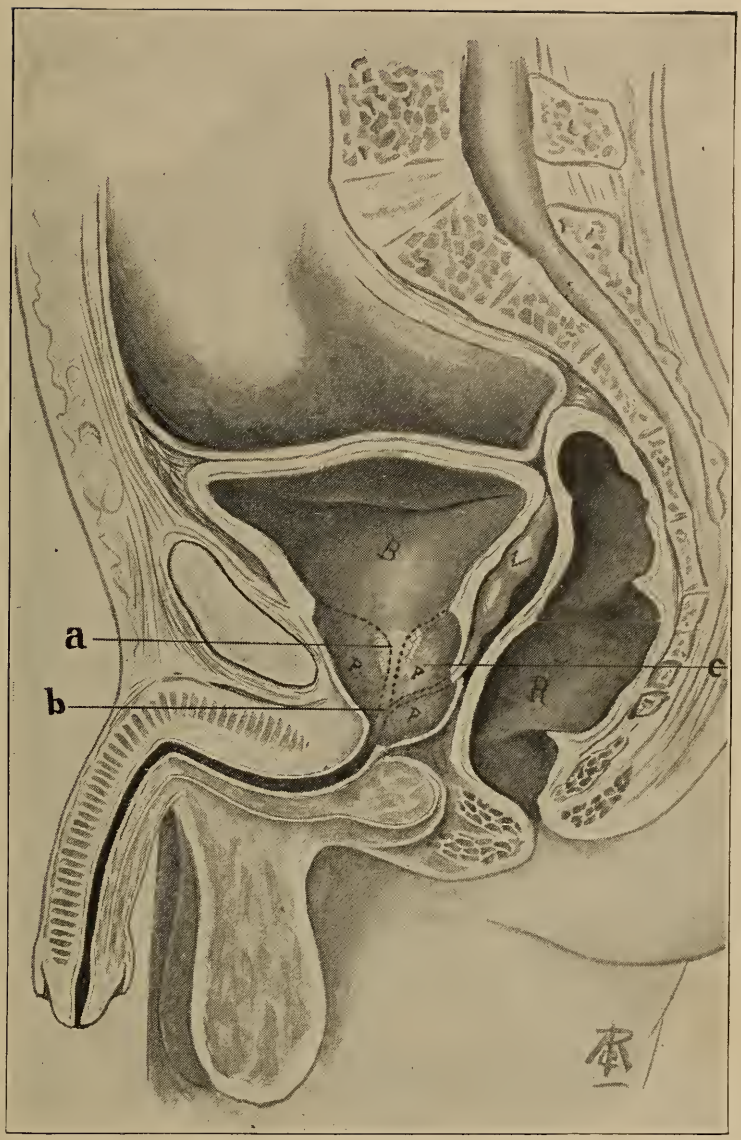

FIGURE XXIV.

are utterly misleading to the ordinary practitioner either that reads these reports in the journal or hear of them in the society. One of these was published in the *Journal of the Kansas City Medical Society* of July, 1908,

in which one of the surgeons *(sic)* reported twenty-six cases upon whom he had operated upon without a failure. An old, honest, long-tried physician, Dr. Jones, arose slowly and said, "I was not going to say a word about this. There are one or two points that have not been brought out. It has been my observation that these cases in the hands of most operators, men of unquestioned ability in the line of operative procedure, that they lose a very large majority of their cases. I recall a series of three operations in one day by a man whose reputation is a by-word in the American profession and all three of these cases died within thirty-six hours."

ANOTHER EXAMPLE OF WHAT WE READ IN THE NEWSPAPERS.

J. W. H. writes: "My urine flow is continuous. I wear a rubber urinal. My leg swelled. Took a hot sulphur bath, which reduced the swelling. Can the urine be checked?"

REPLY.—You have an enlarged prostate. As a consequence, your bladder has become infected. The swelling in your leg indicates that the infection has traveled to your kidneys. A urine analysis will show the state of your kidneys. This analysis and a physical examination will show the condition of your bladder.

If your kidneys and bladder are now in condition to warrant or your doctor can get them in condition, the thing to do is to have the prostate removed. See a physician and go to work along these lines.

You should not have neglected this condition so long. You should have had your prostate removed before these other organs became involved, at least so badly involved."

CHICAGO TRIBUNE.

The foregoing has been copied that I might make comment, inasmuch as this emanates from one of the most noted physicians in the State of Illinois. We have here published advice to a layman from a so-called "ethical physician" to have his prostate removed, without the physician even knowing the condition of the man, the condition of his prostate, whether senile hypertrophy, glandular enlargement, or in fact, whether there is any serious disease of the prostate. The man narrates symptoms which are common to cystitis, prostatitis, or urethritis, and which may exist without any disease of the prostate itself, yet he recommends removal of the prostate, and condemns the man for not having had it removed before.

Now, if a man of such repute gives such advice, practically consigning the man to a premature grave, what would be expected of the ordinary general practitioner? Is it a wonder that medicine and surgery have not progressed with all this science instead of retrograding?

Case 41. A lawyer; aged sixty-eight; married; negative history. He had observed some slight difficulty in voiding urine for about five years. There was no pain attending the act, at first, but it required longer time than normal, and some effort to thoroughly evacuate the bladder. This condition gradually became more pronounced, until he observed that he could not entirely empty the bladder. He then consulted his family physician, who began the use of sounds, then the catheter. The urine became turbid, ammoniacal and very offensive after standing. Washing of the bladder was resorted to, without any relief.

When he consulted me he had to use the catheter from four to five times during the twenty-four hours. He was able to expel by force, at times, from one to

four drachms. It contained a large quantity of mucus and pus, strongly ammoniacal in odor, and alkaline in reaction.

Both lobes were hypertrophied—the left one more markedly. The bar at the neck of the bladder was especially large, and firm. There was no tenderness upon pressure of the gland through the rectum. Its large size obstructed the fecal discharge, causing constipation. There was very slight tenderness in the prostatic urethra, notwithstanding the long continued use of the catheter.

The urethra, as determined by means of a bulbous bougie, measured ten and one-half inches; through the prostatic urethra to the entrance of the bladder two and one-half inches. It was quite noticeable when the in-instrument had passed through the constricted orifice made by the encroachment of the third lobe upon the neck of the bladder. After the instrument had ceased to encounter resistance in its passage then I knew that it had entered the bladder and could measure from that point, and so determine how much the urethra was elongated compared with the normal length.

Another method of determining the elongation of the urethra is by measuring the distance between the entrance into the bladder and the beginning of the prostatic urethra, that is, the triangular ligament.

The method is to insert the bougie until it enters the bladder; then to slowly withdraw it, observing the point where the first resistance to the passage of the bulb is met with in the constricted orifice. The next point is to note where the bulb of the instrument passed through the prostatic urethra and entered the membranous urethra, as indicated by a jumping or sudden passing over the triangular ligament—then to measure the distance between these two points.

The use of the catheter was continued, as required, to evacuate the bladder. At the end of the first month's treatment, it was necessary to use the catheter on an average of every second day. At times he would not use it oftener than the third or fourth day, then again daily for a few times.

This condition continued, with some interruptions, for four months. He would occasionally go two weeks without using the catheter, then again had to use it daily for a few days. His general health was much improved, having gained fifteen pounds in weight. The treatment was discontinued for a month, and again resumed; and continued two months longer, when he returned home.

On his first return home he was very much discouraged; but within a short time he wrote to the author that he was much improved and almost well. He stated that his improvement began after he had been home about four months, and that it was steady and well sustained. He continued to grow in weight and strength. His digestion had become good, and his bowels were working in a natural way, as he expressed it. The heavy thick sediment in his urine and the pain in the bladder had both disappeared.

Four years thereafter he called at my office, and his condition was that of a strong, healthy, robust man. He stated that he had been in perfect health since he last wrote to me, which was about four months after he had returned home. He feels now as if he had never had a sick day.

Case 42. Hypertrophy of prostate, cystitis, proctitis. Physician, aged sixty-nine; married; had gonorrhea in early manhood, from which as he supposed he readily recovered. He had ridden horseback a great deal up to his sixty-fifth year, without discomfort. About that

time he began to feel an uneasiness in the region of the perineum. The flow of urine had also become sluggish, and somewhat difficult to start. He abandoned the saddle for a buggy, when he soon found it necessary to use a pneumatic rubber ring for a seat, and to empty the bladder with catheter. The catheter had been in use for more than a year when I first saw him. His general health was very much impaired.

Upon examination I found the left lobe very much enlarged, the right less so, but quite nodular. There was very slight pain upon pressure of the gland. The adjacent tissues were somewhat congested and tender, from obstructed venous circulation. The muscular bar at the neck of the bladder was very large and firm.

His condition was somewhat encouraging, and then would become somewhat like it had been formerly. As I did not know at that time as much about controlling and curing these conditions of true hypertrophy as I do now, he drifted along for several years, with varying results. At times he had but little residual urine, at other times he was unable to evacuate the bladder without a catheter. Some years thereafter I insisted upon his return, stating that I had so improved my methods as to be now able to promise him better results than formerly.

The results of treatment at this time were very tedious and very unsatisfactory. At the expiration of three months the congested inflammatory conditions had been very greatly allayed, and he suffered but very little from acute symptoms. But the obstruction to the flow remained practically the same. The only advantage that resulted from treatment at that time, was that by allaying the acute symptoms the catheter could be introduced with less discomfort, and its use was not called for so

frequently. He was sent home in this condition, and remained practically comfortable for several years. He came back at that time for treatment, and is now practically cured of his trouble. This case will be further dealt with in following pages.

Case 43. J. B. H. Farmer; negative history; five children; had been strong and healthy until sixty years of age. He then began suffering with what he termed "kidney trouble," with excessive pain in the back, voiding urine frequently, though only a little at a time; marked pain in the right hypochondriac region when the bladder became filled. He described it as a painful lump in his side. He had never been enabled to thoroughly evacuate the bladder; he had not used a catheter. By means of the latter, 12 ounces of offensive urine was evacuated, which gave relief to the painful lump. There was but little acute inflammation about the prostate, but it was true hypertrophy. Relief of this enabled him to evacuate all but an ounce of urine—at times there was a residue of only one-half ounce. He was completely relieved of the pain in his side, although the backache remained. After the third week of treatment, he began passing large quantities of grayish-white flocculent matter from the pelvis of the kidney on alternate nights. By the way, this matter that passes from the pelvis of the kidney usually passed at night, and is evacuated early in the morning. He stated that he had passed fully a quart of this "whitish burning stuff." He insisted upon knowing where it came from, as he said he had never passed it before. At the expiration of a week, the urine completely cleared up and assumed its normal straw-colored, trnslucent appearance.

He returned home greatly improved in health and strength, but after remaining six months, he complained

again of this lump in his side and of his backache, and I insisted upon his returning for further treatment. He again passed a considerable quantity of whitish-grayish matter from the pelvis of the kidney, but not so much as at the former time. At the expiration of two weeks this subsided, the pain in his back disappeared, and he returned home apparently well, and has not been heard from since.

It is a most pernicious habit that some physicians have of attempting to catheterize the ureters and the pelvis of the kidney. No good can be accomplished thereby, and infectious matter is very liable to be carried from the bladder to the kidney and give rise to acute pyelitis. I never saw but one case where the pelvis of the kidney had completely filled with calculi, forming projections even into the calices. It is exceedingly rare also for the true parenchyma of the kidney to become affected as a result of this, unless it is provoked by catheterization, as acute inflammation of the bladder is provoked by improper treatment.

The large majority of cases that apply for treatment, including those as young as 30, suffer with pyelitis and have this whitish flow from the pelvis, and it is almost invariably termed "Bright's disease," or disease of the kidney. While the pelvis is part of the kidney, yet by reason of its anatomic construction and direct continuity of tissue, it is more associated with the bladder and ureter, than with the parenchymatous structure of the kidney.

Clinical observations, especially during the last few years, has convinced the author that the large majority of cases of so-called "Bright's Disease" are no more nor less than pyelitis, or inflammation of the ureter incident on pyelitis, this involving the pelvis and caus-

ing swelling of the lining of the tunic of the ureter so as to obstruct the passage of the whitish chalky thickened urine from the pelvis to the bladder and thereby causing severe pressure within the pelvis, pyelitis and acute interstitial nephritis. More men die from this source of trouble of the kidney than from all other forms of kidney trouble combined.

Case 44. On May 3, 1911, an old soldier was sent by Dr. Hoy, of Syracuse, Indiana. Aged sixty-nine, married, four children. Began having difficulty in voiding urine, three years prior thereto. The urine passed only by dribbling. The walls of the bladder had yielded to the over-accumulation and pressure of urine, until a sac formed, which bulged upon the left side, forming a large pouch, or "lump," as he called it. Attempts at catheterization had failed by his physician, who sent the man to the writer. After many efforts to evacuate the bladder I finally succeeded in drawing off 42 ounces of offensive, thick, purulent urine, not all at once but within two hours. Great relief followed. Thirty-eight ounces were taken on the following day. He was treated at my office, daily, for one month, when he was sent home in fairly good condition, the lump having disappeared, with only a few ounces of residual urine during twenty-four hours. After remaining home two weeks, he returned and had another month's treatment. He had gained fifteen pounds in weight, in good health, and doing light work. On October 20, 1911, he "called to let you see I ain't dead yet. I am feeling fine. I just came from the hospital, where one of my old comrades was operated upon day before yesterday. He is doing fine, and says that the doctor told him he would be all right in two weeks. Two men are waiting to be operated upon this week."

October 28th: "I came from the hospital. All three of those fellows that were operated upon are doing fine. They were after me to let them cure me. I said: "Well, I'll wait and see how you are all going to turn out.' "

November 10th.: "I have just come from the hospital. All three of those fellows operated upon are dead. I don't want any of that kind of cure in mine."

This man had been an old soldier, and was suffering some from the effects of his army experience. I have kept in touch with this man, and he has been in fairly good condition ever since he was treated, and is still doing farm work.

Case 45. M. L., age seventy-six, married; applied for treatment on Feb. 19, 1910. Physical examination revealed exceedingly tender urethra, especially in prostatic portion. He was compelled to pass a catheter from six to eight times a day and from four to five times at night. He could not pass a drop without the catheter, and its constant use maintained an acute sensation, that was quite difficult to relieve, when necessitated to evacuate the bladder.

The gland was very large, measuring four by two and one-half inches. At times, profuse hemorrhage followed the withdrawal of the urine, which was ladened with pus and mucus. Epithelia evidenced the fact that the pus came from the pelvis of the kidney. He also suffered with metastatic rheumatism, lumbago, sciatica and paresis of the left side. He stated that he had been advised by two physicians that nothing could be done for him except to cut out the prostate gland. He had a friend, upon whom the operation had been performed, that died, so he declined to have the gland removed under any circumstances. This man was extremely prostrated and

anemic; his general appearance showed the toxic effect of the absorption of muco-purulent matter, as well as of disintegrated urine. In external appearance this case was one of the worst the writer had seen for a long time. The odor evidenced that much of the toxic matter was being eliminated through the skin. The bowels were costive and very difficult to evacuate without depressing him too much.

He began improving from the beginning of the treatment, and in two weeks' time, he was voiding some urine naturally. At the end of three weeks, there was only three ounces of residual urine and he was using the catheter only once daily. At the expiration of six weeks he was perfectly well. He left for home, and I did not hear any more from him until I received the following letter from one of the physicians who had advised him to have the prostate removed:

"Willow City, N. D., June 7th, 1910.

"Dr. Geo. W. Overall,
"Chicago, Ill.

"*Dear Doctor*:

"A patient of mine, a Mr. M., has recently returned from Chicago where he was under your care for about six weeks. Before he passed out of my care I had advised operation for the prostatic hypertrophy, from which he suffered, but he tells me that you have completely relieved him from all symptoms by means of your treatment. He is very loud and emphatic in his praises of you, your methods and is indeed a very grateful patient.

Would it be asking too much if I ask for particulars of your treatment. "Cordially yours,

"D. K. Thyng, M. D."

Owing to the extreme prostration of the man when he first visited me (he had served in the Civil War, and the consequent exposure probably had something to do with his prostration) I was much gratified at the cure of this man, and have kept in touch with him up to the present day. I think being a farmer and living a simple life enabled him to rally better than otherwise would have been the case.

This case was one of true, indurated hypertrophy, as illustrated by Figure XX. The result in this case was most remarkable, for three reasons: first, on account of that of his age; secondly, on account of the involvment of the entire bladder and adjacent organs; thirdly, the pyogenic condition of the pelvis of the kidney.

Reports recently show that this man is still in normal condition, regardless of his advanced age.

Many similar and well authenticated cases will be reported in the book.

CHAPTER VII.

SIGMOIDITIS, PYRO-SACS, AND THEIR COMPLICATIONS.

While there have been numerous volumes written upon the subject of diseases of the rectum, and while there are a great many physicians who make a special practice of rectal diseases, there is not one known to the writer who is familiar with its chief characteristic lesions.

More recent observations have convinced the writer that of the long standing chronic diseases of any nature from which people suffer fully one-fourth are complicated with diseases of the sigmoid-flexure. It is a fertile source of trouble, giving rise directly or indirectly to appendicitis—and relief of this lesion prevents or removes the etiological factor of the appendicitis. I am not stating this as a theory, but base my assertion upon practical experience of cases of patients ranging in age from 22 to 86 years.

Figure XXV gives a diagrammatic illustration of a typical case of phagedenic ulceration, degeneration, and stricture of the sigmoid-flexure. The ulcerated tissue in this case was of such nature that on being touched with a fledget of cotton wool it would bleed freely, and the tissue itself was so friable that it would easily break down under this soft cotton application.

Although it partook of a carcinomatous nature and was attended with an offensive discharge, it yielded readily to treatment. Notwithstanding the severe character of this ulceration, there was no pain or irritation to call

FIGURE XXV.

attention directly to it. The most prominent objective symptoms observable were extreme constipation, indigestion, neurasthenia, insomnia, and various nervous disturbances. There was no pain in the left hypochondriacal region, as might be inferred from the presence of such an extensive ulceration as appears in the illustration. The lumen of the bowel had become so occluded at the juncture ST with granulated masses of proud flesh and constriction that it would not permit an instru-

ment the diameter of a lead pencil to pass. The man began taking large doses of Epsom salts to relieve the constipation. The quantity was gradually increased and other cathartics were taken, to such an extent that they had, at last, become inert; and he was necessitated to resort to enemas, although it was impossible for him to force much fluid through the narrow orifice.

Examination disclosed the rectum filled with a semi-fluid mass of fecal matter, which was not apparent to the patient. He was in apparently good physical condition; but weak, and easily fatigued. Valvular insufficiency and endocarditis were prominent symptoms. This man had been treated during eight years by electro physicians and members of all other "pathys." His last doctor was an osteopath whose manipulations gave absolutely no relief, but on the contrary caused hernial rupture of a serious nature.

(U) illustrates the ulcer; (B) the bladder; (G) ganglia, controlling this part of the bowel; (C) spinal center of reflexes; (S.T.) stricture; (O. P.) positions where they usually operate when resecting the bowel.

It is exceedingly difficult for one not familiar with these troubles to diagnose them correctly, owing to the numerous valves at every turn and twist of this portion of the bowel, as illustrated by A, B, D, of Figure XXVI. (D) illustrates an extensive ulceration of the sigmoid, which occurs frequently just beyond the first curve of this organ. When ulceration occurs at this point it invariably produces a close stricture. This stricture is very unyielding and persistent, because of the fact that the ulcerated surface is cut off by the stricture and rendered inaccessible to treatment, as the stricture is *just below* the ulcerated surface. There is also very grave danger of the local treatment producing inflammation

and spasm of this strictured portion of the bowel, so as to completely obstruct fecal discharges. Cathartics or any violent purgative are liable to produce the same condition. It is absolutely necessary to relieve this strictured portion of the sigmoid before remedies can be applied to the ulcer for its relief. There is a thick gelatinous mucoid discharge (at times attended with blood and pus) that escapes through the stricture from

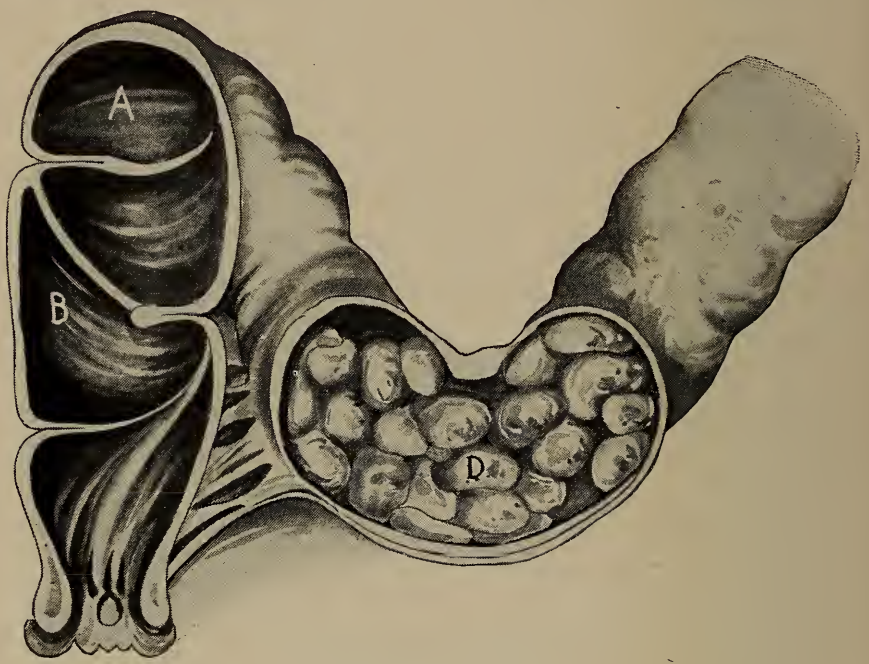

FIGURE XXVI.

the ulcer. The source of this discharge has long been a mystery to both patients and physicians. It is rarely attended by any odor, and sometimes is so abundant as to cause a looseness of the bowels, to such an extent as to overcome the obstruction caused by the strictured condition. I am repeatedly asked, what causes this trouble? My reply is that I do not know; but I am inclined to believe that the abandoning of our old,

harmless, long-tried remedies, as castor oil and salts, for the various new tasteless compounds, are the most frequent causes. Many physicians doubtless recall the excitement and enthusiasm caused about twenty-five years ago by a claim made by a physician who brought out a small book on "Orificial Surgery." In this book the author claimed to have cured practically all forms of chronic diseases, including "consumption," "rheumatism," neurasthenia, and other troubles by resecting or removal of about an inch of the lower rectum. The benefits derived from this operation evidently resulted from the removal of overticula and pus sacs along with the removed bowel. The operation, by shortening the tunics of the rectum caused a "drawing" sensation.

Figure XXVI shows the valves (A and B) in the sigmoid; (D) shows ulceration.

The upper and the lower portions of the bowel were brought in apposition as illustrated by Figure XXVII. The operation, however, usually results in complete closing up of the bowel, and an operation has to be performed for the formation of an artificial anus, as illustrated in Figure XXVII.

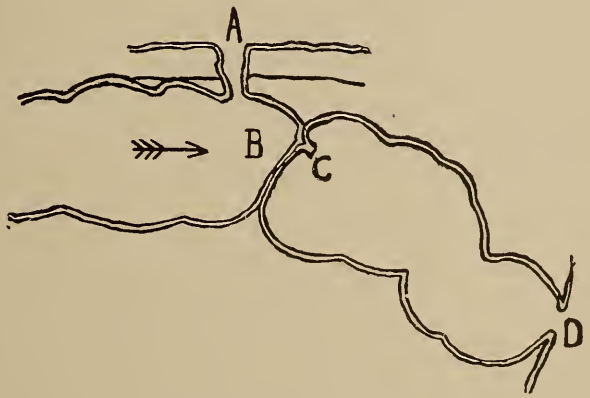

Figure XXVII.

"B" shows occlusion of bowel at the operation; "C" pedicle; "D" the old anus; the arrow indicating the direction of the feces down the descending colon, and out the artificial anus "A," on the left side, under the rib.

Recovery from this operation was comparatively rare.

Investigation resulted in discovering many of the same nature. There were also several cases where cauliflower growth extended almost entirely throughout the sigmoid flexure. Before meeting the before-mentioned case, my attention had never been directed to these particular lesions, except incidentally. Since then I have found that they are extremely common, and attended by almost every conceivable physical and nervous disturbance; paralysis, heart disease, neurasthenia, epilepsy, nervous indigestion, and constipation, are the most common sequelae of such lesions.

Case 46. H. P. S., married, 86 years old, negative history, energetic. Consulted the writer about nine years ago for enlarged prostate. Cure of this was effected and nothing more heard from him until recently. He then informed me that after removal of the prostate trouble he had enjoyed excellent health in every respect until about six or eight months ago, when he began to suffer with constipation, indigestion and periodical pyrexia. He applied personally and said, "As you cured me nine years ago of one trouble, I am now here to see if you can cure me of another that has not only annoyed me considerably, but has been so rebellious to the efforts of several other physicians that I have come to see if you can relieve me of it. The fever at first would begin about 4 P. M. and last until 9 P. M. Of late I am practically never free from it, although it generally began to rise between 3 and 4 P. M., and reach its maximum

of 102-103F. by 9 P. M., then gradually decline, but would not entirely pass off before it would begin to rise again.''

In this instance the patient had dull aching sensation in the left hypochondriacal region, and this was most marked during the extreme pyrexia. The inflammation and tenderness gradually subsided upon the application of local remedies, was soon attended with defervescence, and ultimate cure after about three months of continuous treatment. By the latest advices he has moved to California and is now enjoying perfect health.

Although there has recently arisen a campaign against cancer, those waging this war acknowledge that there is no theory yet advanced regarding its cause, diagnosis, and cure, that will bear examination. The only method of cure advanced consists of surgical procedure. If true cancer exists it must be admitted that the removal of any part of the growth does not remove the constitutional cause. Both local conditions and constitutional symptoms should most prominently exist before any case can be truthfully diagnosed as carcinomatous or tuberculous. It is generally conceded that any surgical interference in *true* cancer simply aggravates the local conditions; and the less there is of such interference the longer will be the life of the victim.

The sigmoid-flexure is much more frequently prone to ulcerations and other similar disturbances than is generally believed; many prominent physicians consider it especially susceptible to carcinoma, and that the majority of such disturbances are cancerous. The writer is willing to concede that there are, say, two per cent. of these cases true cases of cancer in the sigmoid, but maintains that not one-half of one per cent. of similar cases in the prostate and rectum are of that character.

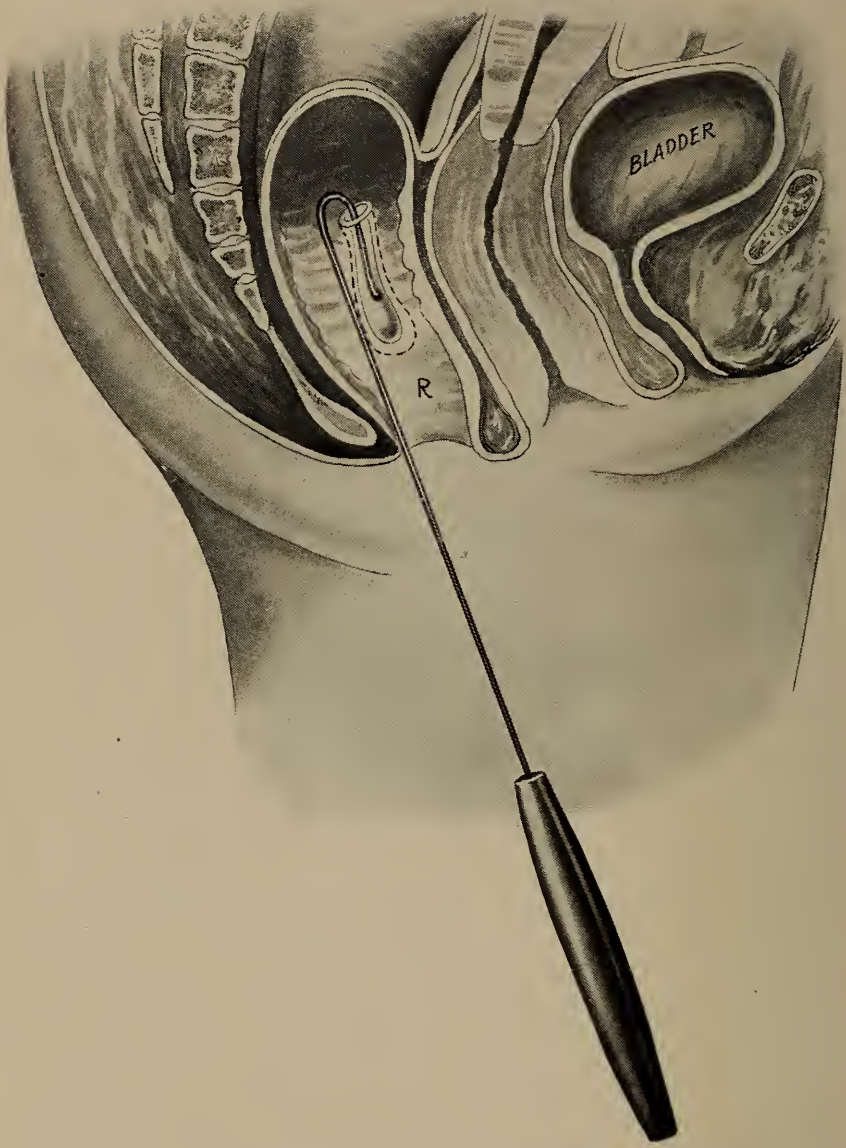

FIGURE XXVIII.

LESION OF THE RECTUM.

Figure XXVIII illustrates a very common lesion of the rectum which gives rise to more troubles directly and indirectly than any one would possibly imagine. Paraplegia of the left limb, constipation, epilepsy, indigestion, itching about the anus, nervous insomnia, and nearly every conceivable nervous disturbance has been traced to this trouble, and its removal has invariably resulted in the disappearance of these symptoms.

The writer believes that the occurrence of any one or more of the before-mentioned symptoms is invariably accompanied by the presence of one or more of these overticula. Six of these overticula (or "pus sacs") have been found in one person. For their removal I have devised special instruments; without these instruments the operation is quite difficult.

The cause of this particular lesion is very obscure. Its aperture is directed upwards as illustrated (showing hook entering it). The duct extends from the aperture downwards; and terminates in a blind cul-de-sac, near the anus. It is absolutely necessary to remove both the duct and sac, to effect a permanent cure. The orifice varies in size from one-sixteenth or one-eighth of an inch in diameter, or a little larger than a pin's head. They are very difficult to locate, as will be appreciated from my experience in endeavoring to point out the position of one to a physician who had made numerous attempts to find it in a patient whose symptoms indicated the presence of such a lesion. In giving a clinical demonstration to this physician, he remarked that he could now understand why he had hitherto failed to locate these lesions. He said it was due to the fact that "the landmark was so different from that which he had ex-

pected to find,'' as he was looking for a round hole instead of a slit. The outlet of this particular lesion consists of a slit with a hole near its center.

As a further illustration of the difficulty of locating these lesions by inexperienced practitioners, I may mention the fact that in a consultation with an old rectal specialist of thirty-five years' experience, he asserted that he had never seen or heard of such troubles. Though I endeavored to demonstrate to him the nature and importance of the lesion, he could never be induced to follow it up in his practice, although one of his own cases was entirely cured by myself of a serious nervous complication arising from one of these lesions that had resisted all his efforts for more than two years. Regardless of a favorable result in this case, he has never been able since that time to locate one in any of his other patients, although as before stated such lesions are quite common.

They are specially irritating to the prostate and adjacent organs; in fact there are many cases or prostatic trouble that are so aggravated by these lesions that it is impossible to cure them until the lesions have been removed.

It has been extremely difficult for me to demonstrate the presence and show the location of some of these lesions even to my own assistants. They have often been puzzled in tracing the duct leading from the orifice to the blind cul-de-sac, and instead of following the line of least resistance along the course of the canal to the bottom of this sac (which contains pus or sanguino-purulent fluid) they frequently simply pushed the hook beneath the mucous membrane, thus avoiding the natural channel and making a new channel, which procedure always fails to give relief, as the same old duct and sac

remains, secreting its poisonous fluid, which constantly saturates the vessels of the entire system with poisonous matter.

Case No. 47. F. C.; age 26 years; married; Swede; occupation, chauffeur; negative history; strong and robust up to two years since. At that time began having periodical attacks of typhlitis, varying at first from two to three months apart, then monthly. Would swell up with gas in both bowels and stomach and suffer intensely from pressure, constipation prominent symptom; during first attacks was relieved by mild cathartic; afterwards exceedingly strong purgative was necessary to obtain relief. Writer saw him during three of these attacks and insisted upon an examination, to which he finally submitted. There was but little prostatic irritation, but main symptoms and trouble were found in sigmoid flexure, examination revealing not only an ulcer, but marked closure, the lumen of the bowel being not more than one-third of normal. This condition grew worse from day to day until an attack precipitated an unusually violent distention of the bowels, and another physician was called, the patient not being where the writer could be consulted. This physician diagnosed his case as acute indigestion and remedies therefor were given with negative effect. A second physician was called in consultation, when it was decided to examine the blood, and await developments. Microscopic examination of the blood was negative. This procedure was continued daily *for three weeks,* the only treatment attempted being the administration of ten drops of tincture of opium, with beef tea, in rectum, every two hours, both day and night. The man grew worse steadily, and the writer was called to see him in consultation, by his wife. The physicians in attendance were reminded of the fact that cathartics had

formerly given relief, and of the condition of the sigmoid. However, the writer was overruled; and, owing to the long continued swelling and exceeding tenderness of the abdomen, the attending physicians both diagnosed the man's ailment as "*primary peritoneal tuberculosis,*" and insisted that microscopical examination revealed this fact, and decided to continue their opiates and beef tea with examination of the blood and await the result. I told his wife that there was absolutely no chance for him to recover under his present treatment; but as the other physicians had the case I could do nothing. She was greatly distressed and finally, after two weeks (her husband growing worse all this time), dismissed the attending physicians and had me called. The whole abdomen was greatly swollen, the peritoneum involved, and so tender that he could not permit the slightest percussion without much suffering. My first efforts were directed to evacuating the bowels by administering minute doses (one-tenth grain) of calomel, and one grain of bicarbonate of soda every hour during the day. The opiates were discontinued. He had been given them day and night for five weeks. He became so extremely nervous from the cutting off of the opiates so suddenly, that I was necessitated to give him small doses of them before stopping them altogether. On the following day, an enema was given of a special preparation, that caused him to pass very large quantities of lumpy offensive fecal matter, that had evidently been locked up a month or two, if not longer. While he was being given the opiate and beef tea there was a continuous fluid discharge from the bowel, with very little fecal matter, and it was impossible for me to convince the attending physician that any still remained in the bowels. At this time the man could not stand alone nor could

he walk across the room, being so weak. He had a constant hectic cough, considerable expectoration, and temperature ranging from 102 to 104. Defervescence gradually took place, until three days later he was devoid of fever and taking nourishment. A week after this, he was at my office under treatment, being carried there in an automobile. He rallied very rapidly, cough disappeared, strength gained, yet the peritoneum remained tender several weeks. He had by this time gained so much in strength and health that he insisted upon resuming his work as a chauffeur, and made application for such position. At this time I left the city for my annual vacation, turning the man over to my assistant. On returning two months thereafter, I learned he had relapsed and was again confined to his room, being treated by a Swedish physician, who diagnosed his trouble as tuberculosis, and promised to cure him in six weeks. The wife being a Swede, had confidence in her physician, and insisted upon his continuing with the case. The young man died a few weeks later from profuse hemorrhage. I never learned whether the hemorrhage was from his lungs or his heart, but believe that it was due to the latter, as he suffered with marked endocarditis in connection with his other troubles.

Case 47. J. B. A., aged 60; married; four children; negative history; farmer. Although thin and delicate in appearance, he was very active and strong, being able to do a great amount of manual labor. He had been slightly costive for several years, and had noticed some trouble since then. On arising in the morning and at stool when attempting to leave, he noticed that he lost the use of his left leg. He managed to return to his room and called an attendant, and afterwards a physician, who examined him and diagnosed his condition as

"blood poison." The left limb was very much swollen, considerable varicose disturbance with some pain throughout the calf of the leg, the popliteal space, and the inner side of the thigh. The writer was called in at the time, and upon examining the patient in conjunction with this physician, told the latter what he suspected was the cause, and insisted upon the patient returning to his office. A "py-ro-sak" was removed and in three days thereafter, he was walking as well as he ever did, with the exception of some little soreness in his limb. He recovered fully, and has gained fifteen pounds in weight and is better than he has been for twenty years. A fourth very similar case to this occurred in a man of 40 years of age—had been bookkeeper practically all his life, and was relieved as quickly and as permanently as the patient just spoken of.

Case 49. F. W. B., age 23; single; negative history. Office man. Very constipated from early boyhood, and often experienced pain after stool. Four years prior hereto, he began noticing some pain in voiding urine. His general health began declining, attended with pyrexia, slight headaches and irritative cough, which had been termed "bronchial cough." This cough at times would become so excessive as to cause soreness and some purulent secretion, but very little. The last physician had pronounced it "tuberculosis," and several examinations by different bacteriologists reported "tubercular bacilli." The patient was not satisfied with one, two or three of these examinations, but had them made in different sections of the country with a history of the case, until he had finally been convinced that it was "tuberculosis." Upon examination I discovered slight prostatic irritation, and irritation of the vesical neck, which yielded readily to treatment. Further examination of

the rectum located one after another of py-ro-saks, until it seemingly was "honeycombed" with these. Nine were removed in succession before any marked relief had been procured. These had evidently been present for several years, and had caused the extension of the irritation and inflammation until the sigmoid-flexure was almost entirely occluded. The relief of this latter completely removed the cause and cured his "tuberculosis." He has not had any cough or any expectoration since, except occasionally when he has a slight cold.

A year thereafter he began having symptoms of appendicitis, pain in the right hypochondriac region every afternoon, which finally culminated in paroxysms of fever. This fever continued to increase until it would reach 102 F. each afternoon, often attended with headaches, pyrexia, and general depression. Defervesence would take place at about 9 or 10 o'clock in the evening, followed with profuse perspiration and very marked depression. He would scarcely recover from one attack before experiencing another. He continued to grow worse for ten days, when he again consulted the writer. The pain in the region of the appendix was most marked, and attended with throbbing sensation, as though purulent secretion had formed. Examination again revealed acute inflammation and nearly complete occlusion of the sigmoid-flexure. Relief of this restored the patient to his normal condition, and he has not had another attack since—more than a year ago; in the meantime he has gained forty pounds in weight, and reports that he is perfectly well in every respect.

Case 49. K. A. B. Age 33; single; negative history; temperate habits, very delicate, thin and emaciated; constipation and anorexia, urine murky, with heavy deposit, alkaloid, hyaloid, mucoid casts; no tube casts;

no albumen; slight trace of sugar; blood count sixty; suffered intensely with back and limbs, voiding urine very frequently, scanty, and with much tenesmus. Rectum very tender; sigmoid ulceration and stricture. Had been afflicted for more than twelve years, and treated during that time by one of the most eminent specialists in city of New Orleans, and by specialists in other large cities; no relief. Examination and first treatment required hour and a half, so extensive was the ulceration and granulations and the almost entirely closed condition of the sigmoid. This case was very tedious and slow in recovering, with periodical return. Some weeks greatly improved, and other weeks suffering intensely. These conditions continued for two months when he returned home in fair health, apparently. Became worse and returned. At this time he began suffering with his limbs, feeling heavy and weighty, with indications, as he feared, of paralysis. This suddenly subsided upon treatment and he began improving rapidly. Again returned home, feeling well. Six months afterwards there was a recurrence of the trouble, though not so marked as the first. Lived in the South in a very low and unhealthy locality, to which fact I attribute much of his ill health. On one occasion, after using an enema, he voided a large quantity of lumpy, offensive fecal matter, as he described it. He passed probably a quart or more, and upon getting into bed, was compelled to get up a second time, when he passed as much or more of this matter as he did at first; and then had passages a third, fourth and fifth time, at intervals of from a half hour to an hour, having voided, as he thought, in all, more than a water bucket full of this lumpy, offensive, fecal matter. Immediately following these passages he became ravenously hungry; and though it was midnight,

and the first time in years that he had had such desire, so great did it become that he left his bed and went to a restaurant to satisfy his appetite. On the following day he experienced the same very great desire for food, and felt much relieved of all his diseased conditions; from that time on his improvement was unusually rapid.

Case No. 50. V. A. T. Age 32. Bank clerk; small in stature; very thin, weight only 126 pounds; extremely nervous and restless, insomnia, indigestion and constipation; irregular heart action; for a year prior to this he had become so exhausted that he was compelled to give up all forms of work. Was treated for six months for stomach trouble, having stomach washed out, and taking various digestives and mild cathartics. Also suffered with stricture of urethra and swollen prostate, necessitating his getting up from three to five times at night, and very frequent urination through the day. Suffered also with backaches, headaches, pains in his limbs, at times causing a heavy, dragging sensation, as if limbs were too heavy to be raised, resulting in stumbling in going up and down stairs, causing him to fall on one occasion; also pricking, tingling sensations along the sciatic nerves, down to calf of legs, on the inside, especially in left leg; also a creeping or drawing sensation across the abdomen, and itching about the rectum. Very close stricture of and sensitive sigmoiditis, necessitating large doses of cathartics to effect evacuation.

There were so many complications, and he was in such a low state of health, that improvement was very slow and attended with many ups and downs for six or eight months before entire restoration. It has now been two years since treatment, and he has gained 26 pounds in weight, and is back to his position, working daily, without a single symptom of his former trouble.

Case 51. A. J. B., minister, 56, negative history, married; up to his fortieth year was in perfect health, then began suffering with indigestion and constipation. Three years before consulting the writer, he began to be troubled with loss of use of left side. This grew gradually worse until one day at stool he fell off the commode and was unable to walk on account of the left limb being paralyzed. Examination revealed varicose enlargement, and involvement of the sciatic nerve. He also had exceedingly sensitive rectum. A "py-ro-sak" was located and removed. Improvement at once began, and six months thereafter, one could not notice any defect in his gait.

Case 52. W. J. H., aged 56, negative history, married, several children. He suffered with chronic enlarged prostatitis and cystitis, also endocarditis and leaking mitral valves, complicated with excessive cauliflower excrescence throughout the sigmoid-flexure. The man had been in this condition practically for ten years, gradually growing worse all the time, until finally he became confined to his room, and in bed most all the time. Treatment allayed the trouble with his prostate and bladder; but he continued to suffer with the sigmoid-flexure, and with extreme constipation. His former physicians had given him large quantities of opiates, to relieve his suffering. These were discontinued after he fell in my hands, although he was constantly begging for them. I think he was taking them clandestinely during all this time, although he denied it. He gained very much in general appearance and in flesh, while under my care; but after treating him continuously for three months I was compelled to dismiss him, still suffering with alternate constipation and colliquative diarrhea. At times his appetite was ravenous, and he seemed to digest his food

well; at other times he complained of not being able to eat anything.

As his improvement at first was rapid I believe he would have been restored to perfect health had he continued the treatment, and had not his wife been secretly supplying him with opiates.

He is at this time confined to his room and remains about the same in health. His disease had been diagnosed as cancer, yet he has persisted in about the same condition so long that I question whether there is any carcinomatous complications attending it, as the symptoms do not indicate such.

Case 53. Miss K. V. H., court stenographer, aged 32, had led sedentary life for fifteen years. Suffered with headache, indigestion, extreme constipation, excessive neurasthenia. Well developed physically, though of an unhealthy appearance. Insomnia was quite marked; so affected her as to make it extremely difficult for her to hold her position. The headaches were almost continuous throughout the day and often lasted late into the night. She stated that she would often lie awake more than one-half of the night using every effort to induce stupor.

The constipation during the first year was relieved by mild cathartics; it gradually grew worse, until finally large doses of the cathartics were unable to effect evacuation of the bowels; the medicines would give rise to tenesmus and colicky pains. Her position in this regard, as she stated, was becoming desperate, and she did not know what it would result in. She also tried enemas, but the medicated water used would not enter the upper bowels, but immediately flowed out. During the last six or eight months every effort to flush the bowels by enema was attended by failure, as she was

unable to get the medicine to pass beyond the sigmoid-flexure. This lady was a patient of Dr. W. A. Hanor, who had managed her very nicely until he found that it was impossible for him to evacuate the bowels by any ordinary means.

Physical examination revealed a closed stricture of the sigmoid-fiexure, complicated with extensive cauliflower growth and ulceration. Although this would seemingly be painful, yet there was no distress of any kind in the region of this lesion, except when applications were made directly to the stricture and ulcerated part, in efforts to relieve it. Treatment of this case was made by Dr. Hanor under the author's special directions and advice, and resulted in very rapid recovery and perfect restoration to normal conditions in evacuating the bowel; relief from indigestion, headaches and insomnia, at the expiration of three weeks' time. Nine months has elapsed and she still reports being in perfect health, and says that it is difficult for her to get enough sleep now, as she is making up for the sleep lost during the years she lay awake.

Case 54. *A case presented in December,* 1911, *with such obscure, subjective symptoms that it brought about thorough research, which ultimately developed in the unraveling of a chain of objective symptoms, and the unearthing of several obscure lesions, which, together with those heretofore made known, has solved the great problem of the causes of from* 80 *to* 95 *per cent. of all chronic diseases, and the perfecting of special remedies, and methods for their cure, will, inevitably, revolutionize the practice of medicine.*

The case in point was that of a man of 32, no venereal history, single, temperate, nervous, restless, insomnia, melancholia, wild-eyed, alternately pale and flushed face,

pain in calf of leg, big toe and back, dizziness, floating spots before eyes, but with little or no vesicle irritation.

He had consulted the best medical talent in the East, including New York, Washington, Baltimore and Philadelphia, for four years. He first sought a nerve specialist and then a rectal specialist, then a genito-urinary specialist. He grew worse, daily, and, being an intelligent man and afraid of himself, he had his family physician go around with him. After *four years' rounds* he was advised to go to a *special* rectal specialist in Kansas City. He was treated there for six weeks by this last specialist with the same result that he obtained from those in the East. The latter having exhausted the man's resources sent him to the writer.

Examination of the prostate revealed it to be normal, excepting slight hyperesthesia. Three days' treatment of the prostate gland, with negative results. Insomnia, melancholia, and his nervous condition worse, as he had hoped for, and had been promised, much relief. Another thorough exploration revealed the source of his trouble, which will be thoroughly described and illustrated in the supplementary volume together with description of the instruments devised by the writer for the relief of such cases. It is almost impossible to describe these thoroughly without illustrations both of the instrument and the lesion.

The writer had much trouble in finally removing this lesion, as he did not at that time have instruments suitable for such cases, and was necessitated to devise special instruments for this temporary purpose. Under these circumstances the case was quite difficult to relieve. The removal of the reflex exciting causes restored tranquility to the sympathetic ganglion, vaso-motor system, and cerebro spinal system. The long pyogenic saturation

of the blood, and the equally as long excitation of the two nervous systems had existed until the man's physical and nervous condition were almost in a state of collapse; yet he responded immediately to the treatment, and was soon able to return home in perfect health.

Case 55. W. B. C., Student, aged 24, single, no venereal history; somewhat similar to the preceding case, except that he complained of dizziness, almost falling upon the street, unless leaning upon a post, wall or house or sitting down. Specks before the eye, mild epileptic attacks, sluggish memory and headaches. Glasses had been fitted by different opticians. Little relief. Up to his seventeenth year he was perfectly well, but at that time he had to discontinue school. Fairly comfortable for three years and returned to school at 20. Headaches, dizziness, and all of the old symptoms returned. Very ambitious and continued school, having his roommate read for him. These irregular attempts at education continued for four years, when he consulted the writer. His condition vacillated; some days he felt well, others worse, until he at last discontinued treatment. At the expiration of two months he returned, when another examination revealed a second and third lesion in succession, which were more difficult to locate and reach for treatment. After their removal, he stayed quite a while, but no other lesion could be located at that time. This doubtless, was due to the fact that he still had the impression that he had consumption, or tuberculosis, as he had been so thoroughly convinced of this fact by his former physician; besides, the cough and weakness continued uninterruptedly, if not even worse.

Thorough additional exploration revealed a fourth pathologic condition. It was necessary to devise special

instruments for the treatment of this trouble, and, as he had been so thoroughly convinced by his family physician that it was useless to attempt any further treatment, he was also advised that on account of the incurable "consumption," and the necessity of changing climates, it was quite difficult for the writer to persuade him that it was possible for him to be cured, although his cough had continued uninterruptedly up to this time. He finally consented to further trial. At the expiration of two weeks' time his pulse was reduced to 82 from 100 and above; his cough was much improved, his appetite had returned, the gases in his stomach were diminished, and he had become much encouraged.

The long continued illness and the thorough saturation of the blood with various purulent bacteria rendered his recovery very slow, and it was four months thereafter before he was dismissed as cured.

The man returned to his work and improved slowly though gradually, regardless of being confined closely at business, until he gained 32 pounds in four years. Since his dismissal, four months ago, he has married; and has been in excellent health and condition ever since. Prior to his marriage he insisted upon undergoing a thorough physical examination to determine whether or not he was in a fit condition for the marriage state.

CHAPTER VIII.

TUBERCULOUS, SYPHILITIC PROSTATITIS, CYSTITIS, VESICULITIS, ETC.

Little mention has been made by authors of syphilitic prostatitis. I, too, had overlooked it as a prominent etiological factor of prostatitis until two very characteristic cases had come under my observation. There is no reason, to my mind, why the prostate should not become subject to the influence of constitutional syphilis as well as the testicles. All cases of syphilitic prostatitis that I have noted have resulted from the tertiary form of the disease.

Case 56. Aged 54; single; sailor. He had had several attacks of gonorrhea, the first at about twenty. At about thirty he had syphilis. He had no recollection of secondary symptoms. He took constitutional treatment for only about six months, and then not regularly.

There were blotches upon the lower and outer portion of his shin bone, simulating syphilides. His rectum was badly ulcerated, extending about three inches from the anus. The prostatic urethra was excessively tender. In fact, he had most of the symptoms attendant upon chronic enlarged prostatitis. The acute prostatic symptoms were allayed for a time by ordinary means; but the indications were so prominent of contitutional syphilis that he was placed on treatment for that disease, ignoring the local condition of the prostate. His improvement was so marked that I was convinced that the

larger portion of his prostatic troubles were due to syphilis. There were many ups and downs attending the cure.

TUBERCULOSIS OF THE PROSTATE.

Of all diseases of the genito-urinary organs, it requires greater elasticity of the imaginative faculties to diagnose this form of disease of the gland than that of any other organ of the body; yet there are writers who describe accurately the tubercular nodules which they think they have detected by examination through the rectum. Of late I have come to look upon "tubercular prostatitis" only as a loop-hole through which to escape the responsibility of failure to relieve an intractable case of chronic prostatitis by the means usually in vogue—namely, the sound, cautery, massage.

The diseased prostate, as much or more than any other organ of the body, often provokes mental and physical depression, which results in emaciation, a hacking cough, and prepares favorable soil for the development and propagation of pulmonary tuberculosis. Many of such cases have come under my care that have yielded readily to treatment of the gland, and restoration to perfect health followed.

ASPERMATISM.

This is a peculiar and rare condition, in which there is a competent erection, and, at times, a slight orgasm, without ejection of semen. Taylor says: "Lesion of the prostate being so often the cause of aspermatism, I always advise an examination of the gland through the rectum." He claims also that aspermatism is caused by the ejaculatory ducts becoming plugged up by sympexia, preventing thereby the escape of the semen into the urethra. He mentions a typical case, as reported by

Beliquet, where relief followed the escape of a large quantity of sympexia through the urethra. Occlusion of the ejaculatory ducts by prostatic calculi has been reported by different authors.

I have observed two cases of aspermatism following chronic prostatitis, one of which was of especial interest owing to some novel symptoms connected therewith.

Case 57. A young man, thirty-two years of age; single, traveling salesman. He had been very dissipated for ten or twelve years by way of hard drinking and excessive sexual indulgence. He rarely became intoxicated, however, but drank continuously. He had had gonorrhea quite often, followed by gleet; with which he had suffered for the past ten years. During one of these carousing bouts he was stricken with paraplegia and incontinence of urine. He had been in this condition for twelve hours before I saw him. The urine was passing involuntarily from overflow of the bladder, indicating paralysis of sphincter urinae.

Relief of the acute symptoms was soon effected. On his abandoning whiskey his improvement began at once; and at the expiration of two months he was able to stand on his feet and pass urine normally. He went home and I did not see him again for more than a year, when he came to my office walking with a cane. He laid his cane aside to show me that he was not forced to use it; there was but little indication of his former paralysis. He reported that he had had no trouble in voiding urine for some months; but that one peculiar symptom was that he was able to have an erection and intercourse normally without passing semen, and without any sensation in the way of orgasm. He also stated that the erection could be produced at will and maintained for an indefinite period, often several hours,

enabling him to complete the act of intercourse several times with no ill effects except prostration from physical exertion. I have heard from him several times during the past five years. He reports his condition about the same as when he saw me last. His health otherwise is good.

Case 58 was that of a man of forty-eight years of age; married; very corpulent; healthy and in perfect condition up to two years before seing me. He had then begun to suffer with chronic enlarged prostatitis and from that time was totally impotent, manifesting all the symptoms usual in such cases. He was treated, and practically relieved of the symptoms. There was a normal recurrence of the functions of the sexual organs, enabling him to have intercourse without discomfort. About a year thereafter, he reported to me that he had begun to have trouble in the way of lack of emission of semen during intercourse. It would pass to about midway of the urethra, where it would stop, apparently from lack of force in the muscles to expel it. There was slight orgasm during the ejection.

There are other cases of aspermia that result from occlusion of the ejaculatory ducts as result of cicatrix following prostatic abscess; other cases have been reported where the ducts were closed by prostatic calculi, thereby obstructing the passage of semen.

CHRONIC PRIAPISM.

Chronic Priapism. Chronic priapism is due most frequently to an acute inflammation of the prostate and prostatic urethra. While the initial causes, in most instances, of the inflammatory conditions are the same, yet it is often found that these have been aggra-

vated by the use of sounds, caustic applications of the deep urethra, or other violent measures.

The localized inflammatory focus, situated usually in the prostate and caput gallinaginis, reacting upon the sexual brain through the prostatic ganglion and independently of mental influences, causes prolonged irritative erections that are exceedingly wearing upon the nervous system. These distressing erections more frequently occur during sleep, arousing the man by their irritative effects, and disturbing his sleep for hours at a time. Paradoxical as it may appear, men so affected are generally impotent and are incapable of obtaining an erection under normal influences. There are others similarly affected where one sexual congress only intensifies the desire for a repetition, which is repeated until complete mental and physical collapse results.

More recent clinical observation has demonstrated to the writer that sigmoiditis, whether due to ulceration, or to a stricture of the latter organ, is the chief etiological factor of priapism. These observations have shown that relief of the sigmoiditis has entirely removed the priapism. This did not occur in an isolated case; but numbers of such have been met with recently, and cases which the writer failed to relieve many years ago have been notified of recent discoveries and have since been cured of this annoying depressing trouble.

One reason why sigmoiditis or other lesion of the sigmoid give rise to priapism is because the nerve center controlling this organ is in close proximity to the genito-spinal center. Again, the location of the pain in the back caused by disturbances in the genito-spinal center where prostatic trouble exists, is in such close proximity to the location of the pain arising from lesion of the sigmoid that they are practically in one and the same place.

There is no disturbance to which man is subject that is so wearing and annoying as priapism.

CHRONIC PRIAPISM.

CASE 59. Man, aged fifty-four; healthy from all external appearances; very temperate and a good business man. He had had one attack of gonorrhea, from which he had apparently recovered. For four years he had been annoyed with persistent erections at night, which would often last two or three hours at a time, necessitating getting up and walking the floor to get relief. On attempting intercourse there was a complete collapse of the organ and utter failure, regardless of all efforts and remedies used for the purpose.

He had been subjected to the use of sounds, aphrodisiacs, bromides and massage of the prostate without benefit.

CASE 60. A minister, bachelor, aged forty-two, and an exceedingly intellectual man, consulted me for chronic priapism. He had been annoyed with the erections for about five years. At first, it only disturbed him at night, but for the past three years it had annoyed him both day and night. He had consulted many physicians regarding the trouble, and several had given him different forms of bromides, which, as he said, had only served to impair his mental faculties, without giving any relief to his embarrassing condition. He requested me not to give him anything that contained any of the bromides, as it was necessary for him, in his line of work, to maintain an active brain. He further stated that these erections often remained hours at a time, even during the day, which maintained the organ in a tender and often painful condition. He stated that he had lived

a perfectly virtuous life; and there was no reason to question it. I explained to him that the symptoms indicated a local inflammation of the prostate and adjacent organs, and that systemic medication could never relieve it. The gland was very sensitive, and quite rebellious to treatment, owing, doubtless, to his abstemious habits.

CASE 61. Physician; single; age thirty-eight; never had gonorrhea. He began having trouble when about twenty years of age. He was treated with sounds at first, without relief, then injections and systemic medications. "For the past twelve years," as he states, "he has been tortured with erections, the organ remaining erect for hours at a time. There has also been a slight urethral discharge for fifteen years; at times it is scarcely noticeable. Seminal emissions, too, occur, at times, even two or three within a week, then again not for a month. Emissions now occur without much sensation. They make me dreadfully weary, causing pain in back, and back of neck. I can't stand mental work, and my memory, I find, is perceptibly failing. I have treated myself, and was treated in New York by two physicians for two years, one of whom gave me bromide of sodium and ergot for the annoying erections without the least benefit. The other used cold sounds and massage of the prostate—all of which gave no relief."

In cases of this nature the prostatic urethra and the gland itself are very tender and much inflamed, on the relief of which, all other symptoms are allayed.

MARRIAGE.

The question of when a man should marry, who has had chronic gonorrhea, prostatitis or any perverted sexual function, is one of paramount importance, and has elicited much discussion and various expressed opin-

ions among genito-urinary specialists throughout the world.

Men suffering from one or more of these troubles are frequently advised to marry before procuring relief, which has entailed untoward misery, unhappy unions and often separation. This subject was discussed at great length at the Sixth Congress of the German Dermatological Society, at Strasburg, in 1898, and it was the concurrent opinion of those present that just so long as gonococci could be detected in the secretions, they were infectious.

One other point upon which all agree is that the gonococci do hide and remain dormant for an indefinite period within the prostate and adnexa; and, while it has been proven that these germs are especially susceptible to germicidal agents when brought into direct contact with them, how are you going to reach them? As Weiss says: "What means do we possess to entice these parasites to the surface?" There is no means known to the profession of enticing them from their hiding places, and the only way to get rid of them is to destroy them within the gland.

There are other diseased conditions of the prostate, however, not dependent upon gonococci, that it is equally as essential to relieve before marital relations should be advised. The cause and treatment of these have been given in a previous chapter.

CHAPTER IX.

NEUROSES OF THE PROSTATE AND ADNEXA.

The sexual organism, of which the prostate is one of the chief factors, is so intimately blended with the central and sympathetic nervous systems, that disease of this gland provokes the most varied neurotic disturbances.

The lumbar spinal center, sacral plexus and great sciatic nerve of the cerebro-spinal system, and the hypogastric plexus of the sympathetic, are in such close reciprocal relation to the nerves of the prostate, that disturbances in the organs to which the former are distributed are frequently the first precursors of disease of the gland.

Often have I seen men who had been dosing their stomachs for dyspepsia, their livers for torpor, their bowels for constipation, their heads for neuralgia, treating sciatica for malaria, plastering their backs for Bright's disease, taking sea voyages for melancholia, when the origin of their trouble was centered in the prostate, or adjacent organs, the relief of which cured their other ailments. There are many of these cases, too, that have no subjective symptoms pointing directly to disease of the gland, yet upon examination the objective symptoms would be most marked.

The erroneous idea, that prevails among many physicians, and the majority of laymen, that disease of the prostate only results from some venereal disease, or is a sequel of senility, deters them from an examination of the gland for these obscure troubles.

This is one of the most prominent symptoms in diseases of the prostate and is manifested in almost every conceivable form of nervous disturbance. The disease so commonly referred to as "nervous prostration" might, in the large majority of instances, be traced to the prostate, should the attending physician take the care to examine the patient for this trouble. The examination is easily made; and even should such trouble not exist, it is better to be aware of the fact, and so dismiss one probable etiological factor, than to continue groping in the dark and dosing the patient "ad nauseam." Because of the almost universal opinion of both doctors and laymen, that to suggest disease of this gland would imply that at some time in life the patient had had some form of venereal disease, the physician is loth to make such suggestion. And, even should he muster courage to do so, he would, in all probability, be met with the prompt reply, "Why, doctor, I never had any disease there in my life." It has been difficult for me at times to convince people that these troubles are not always the result of venereal disease. But, when the patient understands that the doctor's desire to know positively that no such disease of the gland exists, is in order to discard it as a possible cause, the patient will, in almost every case, submit to an examination; and, by means of the *bougie a boule* the trouble in the prostatic urethra will be detected. The examination through the rectum or by cystoscope could be made at the time, or on some other day, should objection be made. Many cases of nervous troubles of an obscure origin have been cleared up in this way.

Sexual neurasthenia is not an idiopathic disease, and

rarely, indeed, can it not be traced to the prostate or genital organs as the prime cause.

I remember hearing a lecturer, at the Blockley Hospital, Philadelphia, say that he had often declared that he would not vote for any man to graduate in his class who failed to suggest examination of the prostate in answer to the following question: "What would you do if a man presented himself with an obscure nervous disease?" At the time I considered the statement absurd—especially as the lecturer was not a Jefferson professor—but I have since often thought it a *very wise utterance.*

Genito-urinary diseases of men as results of prostatitis and the various functional nervous disorders related thereto, whether as cause or effect, are in the same condition that diseases of women were in fifty years ago. At that time the nervous symptoms that accompanied such disorders in females as lacerations of the cervix or perineum, congestion and displacement of the uterus and ovaries, were succinctly, if unscientifically, grouped under the head of hysteria, and these symptoms treated without reference to the cause and often without the least effort to arrive at a correct diagnosis. And today the nervous maladies resulting from a morbid condition of the prostate gland and adnexa, such as mental depression, morbid fears, nervous dyspepsia, palpitation, deficient mental control, headache, and backache, are generally dismissed in the same easy fashion to the category of hypochondriasis.

Considering the immense importance of the problem involved in the relation of the genital function to the nervous system, and the vast amount of suffering entailed upon mankind by the ignorance of the patient and the indifference of the physician in regard to these

problems, remarkably little effort has been expended towards their solution. Whether there is or is not such a disease as spermatorrhea, and if there is, what is its nature and effect; when are involuntary emissions pathological; what are the various kinds of impotence, and how should they be treated; how are morbid conditions of the prostate gland and urethra reflected to the nervous system; how do nervous and other diseases affect the genital functions?—these and other problems of great practical interest have only within very recent years begun to attract the attention of the investigator, while the profession at large is as yet almost blind to their importance.

These conditions have been thoroughly described and illustrated in a previous chapter; and if the reader will take the trouble to refer to it, and read the matter over carefully, these different reflexes will be made clear and plain to him.

While the excitant cause of sexual neurasthenia is traceable in the majority of instances to disease of the prostate and adjacent organs, yet there are other exacerbating etiological factors that must be taken into consideration. Prominent amongst these are excessive smoking, alcoholic stimulants, business cares, domestic worries, climatic conditions and overtaxation of the mental faculties. All these have been taken into account as concomitant factors in genital neuroses. While the profession and many laymen attribute much of these disturbances to the before-named as the chief causes, yet the writer believes, that with the exception of alcoholic stimulants (and possibly smoking) none of them cause this particular class of nervous disease, or at any rate not to that extent as to require treatment; except when the condition is induced primarily by lesions of the pel-

vic organs. So often have these been detected and relieved, and the relief has been followed by the removal of abnormal nervous conditions, that the writer considers it extremely seldom that any serious nervous disorder arises independent of these local lesions in either men or women.

The symptoms of sexual neurasthenia are so protean in nature, that, according to the prominence of one or other stage of its development, it is frequently diasnosticated as oxaluria, lithemia, or disease of the imagination.

Its real and tangible cause is either overlooked, or an attempt to discover its source altogether neglected. The physician is usually content to guess at the cause, prescribe some innoxious remedy, and await the result. Others resort to nux vomica or its alkaloid, combining or alternating it with various other aphrodisiacs, which tend to excite an already tender or diseased prostate. The man returns from time to time and reports some better, then worse; when, in fact, he is growing gradually worse all the time. This condition may continue for a long time, until the man finally becomes aware of a twitching of the muscles of the lower limbs; in others the fingers tingle, or there is an impairment in the use of an arm, noticeable in writing or handling a knife or fork while eating. In others, the lower limbs feel heavy or numb, requiring an effort to raise them in walking; at other times pricking or darting pains in the calf of the leg, in the heel, or toe.

Many men begin with pains in their back, which extend over their hips, down to the calves of the legs. The latter is a very common symptom, owing to the close relation of the sciatic plexus to the prostatic plexus and associate ganglia.

Melancholia is a very common sequel of prostatic disease: and it (as do other neuroses resulting from disease of the gland) assumes a periodicity at first; subsequently it may become continuous. I have clincally observed in men suffering from prostatic neuroses that the periodicity is markedly analogous to the menstrual epoch of women, in that it first appears in paroxysms of about four-week intervals, and, as the disease becomes more aggravated, it assumes a periodicity of two weeks; when, as the gravity of the disease becomes serious, it is daily or continuous. I would advise, in these obscure nervous diseases, or even in *any* chronic condition, where a monthly exacerbation appears, the examination of the prostate, or other pelvic organ. In some cases the periodicity is manifested by bouts of drinking.

It may seem absurd to some; and, if on examining the gland it is found to be healthy, there is no harm done; when you can then dismiss it as being the most probable etiological factor.

Clincal observation has demonstrated that young men suffering from prostatitis of the sub-acute form, are more subject to paraparesis; while middle-aged and old men affected with congested enlargement of the gland are more subject to hemiparesis. While this is not an invariable rule, yet in the very large majority of cases, if the prostate be examined in these paralytic diseases, it will be found to be diseased. Insomnia, melancholia, and mania may follow either form of the disease; but it is rare in the beginning of senile hypertrophy, or until acute paroxysms supervene.

The innumerable nervous symptoms that result from reflex irritation of the prostate or adjacent organs are brought about much more frequently by the sympathetic system or vaso-motor nerves than by those of the cere-

bro-spinal system. Yet these are usually practically ignored as etilogical factors. The more highly developed the nervous system of the individual, the wider is the effect produced by the shock of any disease of the gland. But in the spreading of the effect, the intensity at any given point is diminished. This furnishes the explanation of the seeming paradox that strong constitutions are more liable to severe local disease than are neurasthenics. The molecular changes produced by diseases meet far less resistance in highly involved organizations which are good conductors of every kind of motion, while the resistance offered by a strong constitution tends to produce local functional disease. Thus it is that functional excesses in the strong tend to produce in them excessive functional nervous diseases.

The same fact serves to explain another apparent paradox, that nervous hysterical patients, who run the gamut of nervous disorders every day of their lives, are frequently long lived; disease, as it were, proving an antidote to disease. The destructive force of disease which meets with vigorous resistance in a strong body, concentrates itself locally with lethal violence, while in the weak, nervous constitution, it is conducted away, attenuated, and rendered comparatively innocuous.

MELANCHOLIC MANIA.

This is one of the most distressing as well as most varied in its manifestations of any of the neurotic diseases caused by prostatitis, or by any of the other pelvic organs. Among the incidents of most every physician, long in practice, the proverbial phrase that "It never rains but it pours" has been tangibly presented at some time of his professional career. It fell to my lot some years ago to have had quite a number of these

cases of melancholia following in close order to one another.

Case 62. Chronic prostatitis and melancholic mania. Merchant; aged 44; very emaciated, though strong and an active business man. For two years he had suffered with occasional attacks of nervous depression; followed by hot, alternating with cold, flashes. These "spells," as he termed them, had gradually grown more frequent and aggravated. At first they would occur every three months, then monthly, and finally every two weeks. His temperature would never rise more than one-half degree, even when he said he felt as though he was burning up. I inquired as to the condition of his kidneys, bladder and sexual organs. He was very reticent regarding them and at first strenuously objected to an examination. Finally, upon submitting to an examination, the prostate was found to be exceedingly sensitive and slightly swollen. It was so sensitive that he refused to have it treated. He continued to grow worse, until he was advised by his wife and friends to take a rest. He went to a country town and engaged rooms at a hotel. He had been there just about ten days when he had "one of his spells." His wife sent for a physician; who, after having examined the man, prescribed some innocuous remedy and left. After having taken one dose of the medicine, the man conceived the idea that his wife had connived with the doctor to poison him for the purpose of procuring his money. He violently opposed taking another dose of the medicine, to avoid which (having been persuasively urged to do so), he leaped from his bed and ran out of his room in his night clothes down the stairs from the sixth floor to the office, screaming "murder." He maintained that the author, only, knew his constitution and was capable of prescrib-

ing for him. He had his wife wire me to come and see him (some two hundred miles distant). Several telegrams were sent daily for three days, when I finally decided to go. On my arrival at noon, and making myself known to the clerk at the hotel, he said that my patient was in the dining room, across from the office. I was cordially greeted by both man and wife, who requested me to order my dinner. Questions were immediately propounded by the man regarding incidents at home; evidently, as I understood, to avoid mention of his health. He was quite cheerful, apparently, and discussed different subjects intelligently. The subject of his health was not mentioned until, on leaving the dining room, he requested me to go with him to the parlor, where he narrated the incidents before mentioned, in a very quiet and rational manner, explaining his reasons therefor. He stated that he had had "one of his spells," and that the first dose of medicine was poison; and that he had acted in that way to attract the attention of the police, that they might arrest and lock him up, until I could arrive to treat him. I remained with him several hours and left him in the best of spirits; he consenting to remain there several weeks until he regained his health. On the following morning I heard that he had returned home and was violently insane. He was arrested by the police and incarcerated. He sent for an attorney, to whom he explained that he had been arrested and imprisoned for sinister purposes. He was released, as he was as rational, apparently, as any one. In a few days thereafter he again became violent and was placed in custody at his home. During these attacks he would suffer with continuous priapism both day and night. During the rational intervals he would be comparatively free from the annoying erections. He was

carried to the asylum in this state, where he remained a few months and then died.

Case 63. Insomnia, melancholia, prostatitis. Clerk; aged 38; married. Very large, and apparently in robust health. I was called in consultation, when the attending physician gave the following history: The patient had never had any venereal disease, but had been addicted to excessive venery in early youth; and, at times, later, until within the past two years. He had periods of excessive sexual desires. One sexual congress seemed to intensify the propensity for a second or third in rapid succession. This would last for three or four days, when he would lapse into a state of melancholy and insomnia. He had at first the attacks monthly, attended with only slight depression of spirits; but for six months prior hereto he often would be scarcely relieved of one attack before the recurrence of a second. He would not average more than five hours' sleep during the twenty-four, and only then when under the influence of a narcotic. There were few symptoms indicating prostatic trouble. At times the urine was voided more frequently than normal, and contained an excessive quantity of phosphates and some uric acid.

I advised an examination of the prostate; this was opposed by the patient and not encouraged by the attending physician. I did not hear from the patient again for six months, when I was again called to see him with his physician. He had grown steadily worse and, though taking from sixty to eighty grains of sulphonal daily, he was sleeping not more than three hours during the twenty-four. He had developed a religious mania, and was singing and praying much of his time. He had now become totally impotent. I again insisted upon an examination of the genital organs, which re-

vealed both chronic prostatitis and vesiculitis. Immediate improvement followed treatment of the gland and vesicles, and today he is a healthy, active business man.

I could report several other similar cases with various complications that have come under my observation, where relief of the prostate and vesicles was followed by complete recovery from all other nervous symptoms.

The perversion of the sexual organs, as a cause of lunacy, gave rise to the advocacy and practice, in some of our asylums a few years ago, of castration for its relief.

Melancholia, as a result of prostatitis, does not always develop insanity. I have noted its manifestations in the most varied phases of hysteria, mental and physical weakness, obstinate pessimism, and occasionally extreme optimism.

One hysterical patient that I can recall would lie down upon the floor and roll over and cry for a time and then laugh. He was forty-four years old, married, had three children, and never had gonorrhea. His prostate was so tender that he fainted when it was gently touched. He recovered entirely from his nervous symptoms after the relief of the prostatic trouble. These cases all have an exceedingly sensitive urethra, even those that never had gonorrhea.

Dyspepsia and constipation are common sequels of prostatitis; often, too, when there are no indications pointing to disease of the gland. I recall one case who had suffered with indigestion and flatulency for several years. During this time he had consulted many physicians and had taken all the indigestion remedies advised by both physicians and druggists. He was existing solely upon milk and some form of Battle Creek food. There was not an objective symptom pointing to any form of disease of the gland, and I hesitated very much

to suggest an examination of it. He readily submitted to an examination, to my surprise, when I found the gland slightly affected. I had him discontinue the use of medicines and eat sparingly for a few weeks. I treated the gland through the urethra and rectum on alternate days, and did not give him a single dose of medicine. He fully recovered and gained twenty pounds in weight within two months; and has never had a symptom of his former trouble since, though he eats anything he wishes.

Other cases of indigestion, with pronounced symptoms of disease of the gland, have been quite common.

Sciatica or affections of some of the branches of the sciatic nerve are common sequels of prostatis.

IMPOTENCE.

The term impotence has been defined in different ways. It may exist in a modified degree, or may amount to total incapacity to consummate the sexual act. There may be only a deficiency of erectile power; or desire and capacity may both be lacking. Again, erectile power may be normal at times, when free from erotic excitement; and the organ became flaccid and useless in the presence of a woman. Sometimes an erection takes place at the proper time, but it does not last sufficiently long for intromission, much to the disgust and chagrin of both. At other times premature ejaculation occurs even at times before intromission. Various mechanical contrivances have been constructed to overcome the inefficiency of erectile power. One of these was to tie the dorsal vein of the penis, which process has since been abandoned. Various other mechanical appliances were perfected to increase the congestion of the organ, and thereby endeavor to bring about an increased erectile

power. These, too, have been abandoned, as not only useless, but because they brought about serious organic lesion.

The chief reasons for the foregoing conditions are due to the fact that inflammation, granulated ulceration, and thickening of the mucous lining of the prostatic urethra (as shown by the red in Figure XIV) cause the loss of its normal elasticity. Erection is attended by normal congestion of the penis, prostate, and adjacent organs. This necessarily causes elongation of the penis. The urethra must, therefore, stretch to accommodate itself to this elongated condition. Normal elasticity exists throughout the urethra, with the exception of the congested portion in the prostatis urethra colored red in the illustration previously mentioned. This portion of the lining membrane, owing to the loss of its elasticity, fails to stretch in proportion to the other, and thereby precipitates a premature discharge. The abnormal condition of congestion prevents this part of the canal from accommodating itself to the elongated penis when erect.

At other times this ulcerated portion of the prostatic urethra transmits an abnormal irritation to the prostatic ganglion, also causing a premature ejaculation. This irritation is repeated from time to time owing to the local inflammation of the prostate, and one ejection so arouses the irritation that there is a continuous repetition unattended by the normal emotions. When such is the case, these premature discharges continue until they finally bring about total impotency, or complete loss of erectile power, as well as of all desire or even the normal pleasurable sensation attending the act. When such conditions are brought about by this frequent repetition of the irritation, mental depression, melancholy, and often insanity are the most natural sequelae. In

fact, most of the inmates of our lunatic asylums are brought there by lesions of this organ and their sequelae; and the recognition of this fact led Dr. White about twenty years ago to advocate castration for the relief of insanity.

I shall not here attempt a discussion of the normal mechanism of erection; it is chiefly under the influence of the nervous system, which is controlled mainly through the "sexual brain," located in the prostate, or, as many think, in the caput gallinaginis. There is no paralysis or loss of power in the muscular or vascular conditions of the organ that affect the mechanical part of the erection, as the parts mainly at fault are the prostatic ganglion and the genito-spinal center of the cord.

Failure to perform the act, at some particular time, often becomes so impressed upon the mind of the man, that even after the restoration of the prostate to its normal condition, it requires several efforts to restore confidence.

I recall the case of a libertine, who, suffering from prostatitis, had made repeated failures with his mistress, and after having been restored, would still fail with her; yet complete the act perfectly with other women.

There is often diminished sensibility of the penis and scrotum, which appear also cold and lifeless.

Impotency due to disease of the prostate and vesicles is almost invariably attended with seminal loss in some form; that is, in young or middle aged men. The terms in general use for unnatural seminal discharges are somewhat confusing, as they are often used synonymously. Those to which I adhere are nocturnal or involuntary seminal discharges, pollutions and spermatorrhea.

Nocturnal emissions often occur under normal conditions, when a man is single, young, strong, and virile,

and whose seminal vesicles are filled, and who has been abstemious with regard to sexual relations. Under these conditions the impulse is transmitted to the prostatic ganglion during sleep, and so rouses the organs by local irritation that an emission and orgasm are caused, and the man is aroused from sleep.

Pollutions, on the contrary, may take place under similar circumstances; but they result when there is either disease of the prostate, or of the prostatic urethra, and the impulse has so aroused the prostatic ganglion as to have brought about such frequent discharges that loss of normal function has resulted, and the discharge occurs unattended with any emotion or sexual orgasm. These pollutions, however, occur rather in a passive form, while normal emissions that occur are attended with excitation.

Spermatorrhea takes place in a slow, dribbing manner, without erection or orgasm. It produces a sensation as though something was running from the penis. This sensation may be concomitant with either of the previously mentioned forms. Moreover, it is often the case that when prostatorrhea alone exists it is mistaken for spermatorrhea. The discharge in the latter disease is nothing more nor less than a catarrhal discharge of the prostate, resulting from chronic inflammation. Its presence is often erroneously diagnosed as indicative of gonorrhea or gleet. I have known many young men to be treated for an indefinite period for gonorrhea, who had a simple prostatorrhea, resulting from masturbation and irritation of the gland.

Nervous depression (or moodiness) is not due to the loss of semen but is due to a catarrhal discharge from the prostate and from lesions of this and adjacent organs. Even when seminal discharges are prominent, it is not

ascribable to this latter cause, but to the incessant reflex nervous irritation to the cerebro spinal center resulting from the condition of the diseased gland.

Should an emission occur when asleep and not oftener than once in ten days or two weeks, in a man of vigorous habits, it should not be considered pathological, when the man had abstained from all sexual relations during that time. Ultzman and S. W. Gross concur in this view.

I cannot impress too forcibly the importance of an examination of the gland in these obscure cases, as I know too well that many physicians are prone to neglect such, and yield too readily to an objection upon the part of the patient to submit to an examination because of over prudery, or "it suggests venereal disease."

I can recall several suicides of prominent business men, who, if their prostatic conditions, had been properly diagnosed and relieved, could have been saved from an untimely death.

Men suffering from melancholia, as a result of prostatitis, are much more able to resist the evil effects of the disease when employed than when idle. It is very unwise to advise such men to go away for a rest. I have known of several instances where men were so advised, and who, having no other mental employment than to brood over their ailments, became maniacal or suicidal.

The simple knowledge of impotency so preys upon the minds of some men as to aggravate their physical and mental condition, impair their digestion, disturb their sleep, and wreck their health.

STERILITY.

Potentia coeundi does not always imply *potentia generandi.* The latter depends entirely upon the procreative

power of the semen, while the former implies the ability of the man to complete the act of coitus.

It is a well-known physiological fact that healthy prostatic fluid is essential to perpetuate the lives of the spermatic germs until they reach their destination. The vesicles, too, are important factors towards maintaining the vitality of these germs. The prostate and vesicles are in such close proximity and so allied in their physiological relations, that disease of one readily extends to and involves the other.

It is not infrequently the case that men are able to complete the act of coitus, yet the spermatozoa may be lifeless or so impaired in vitality from perverted prostatic secretions as to be rendered sterile. The wives of such men are too often subjected to all kinds of treatment and operations for barrenness, when the fault lies with the men. Several cases of this kind have come under my care, where relief of the prostate was followed by fruitful results.

PROSTATORRHEA.

Ultzmann says: "With every sexual excitement, as soon as erection of the penis has occurred, long before ejaculation of semen has taken place, a clear, transparent, viscid drop, like white of egg, oozes from the meatus. This clear, viscid drop represents the secretion of the accessory glands of the urinary and genital tracts, and consists of the secretions of the prostate, of Cowper's glands and the glands of Littre. Since the prostate is the largest gland in this connection, it is evident that the mass of this fluid must be the prostatic secretion. If this clear, viscid fluid is secreted in greater amount, indeed continually, and without sexual excitement, this condition is called prostatorrhea."

The definition or explanation of prostatorrhea, as given by Ultzmann is usually accepted by the profession, but it is far from being correct. Prostatorrhea is really an abnormal discharge from the prostate gland, resulting from inflammation and lesion therein. The normal secretion, as described by Ultzmann, is present in all men *in health;* and this secretion, under normal conditions, is requisite for the support and maintenance of the spermatozoids until they reach their destination. But when the secretion is the result of an *abnormal pathological condition,* then, instead of supporting the spermatozoids, it has a tendency to aid in their destruction.

The fact is that the normal viscid secretion attending sexual excitement and erections, is often mistaken for a pathologic state, when it really indicates a healthy condition of the gland and is premonitory to a seminal ejection. This prostatic secretion serves to lubricate the channels and favor the passage of semen, besides its aid in maintaining the lives of the spermatozoa.

Prostatorrhea is due to an inflamed condition of the gland as a result of gonorrhea, masturbation or other sexual excitements. Prostatic calculi or rectal diseases may serve as exciting causes, but they are more frequently the effect and not the cause of the trouble.

The differential diagnosis between prostatorrhea and spermatorrhea depends largely upon microscopic and chemic examination of the secretion. The presence in the secretion of Bottcher's crystals and amyloid bodies would point strongly to prostatorrhea, while the presence of spermatozoa would not exclude that condition as a possibility, as spermatorrhea often accompanies prostatorrhea, though the latter is much the more common.

Azoospermia is a common sequel of prostatitis and vesiculitis, as the perverted secretions of these organs'

disorders tend to devitalize and destroy the spermatic germs and render the man sterile.

The urine in these cases is variable in quantity, and is usually of light color, containing small shreds of hook-shaped flakes.

Prostatic Faces. Just as Kelly describes an ovarian face in women, there is an analogous expression in most all men suffering from chronic prostatitis. It is quite noticeable in many men, and readily disappears upon restoring the gland to its normal condition.

Glycosuria and albumen often appear in minute quantities where neurotic symptoms are prominent; but they are of transient nature and readily disappear as soon as the local trouble is relieved. Neither of these conditions implies interstitial nephritis. Claude Bernard demonstrated that puncturing the floor of the fourth ventricle would produce albuminuria or glycosuria, and it is now well known that many nervous shocks cause these symptoms to temporarily appear.

Imaginary Impotency. Much has been written and spoken of impotence existing only in the head. Many of these opinions have originated from some of the most prominent surgeons and genito-urinary specialists, who had either failed to locate the cause of the trouble or to relieve it after having discovered the source. But very few of these cases are really imaginary.

Case 64. Aged thirty-two; single. Never had gonorrhea. He had been addicted to sexual abuses followed by frequent emissions and chronic discharge. The first physician treated him with tonics, or constitutionally; the second with sounds; the third with both. After having gone the rounds for six years, trying to get in shape to marry, he was advised to do so, and was told that he would then become normal. The trouble con-

tinued. Two years after his marriage he came to me for treatment. I discovered an inflamed prostate and urethra. Normal functions returned just as soon as these organs were relieved, without taking a dose of constitutional medicine.

Case 65. Aged twenty-eight; strong and robust in appearance. He was not sure whether he had ever had gonorrhea or not, as some physicians had told him he had, and others that he had not. He was annoyed with excessive pollutions. Different physicians advised him to marry, and that his trouble was in his head alone. He recovered his sexual powers when relief of his prostate was effected.

PARAPARESIS.

This condition calls especially for a thorough examination of the prostate gland and adnexa. For the past fifteen years or so, since I have had my attention more especially directed to the prostate as an etiological factor of this trouble, I have not seen a single case of paraparesis or impaired function of the lower limbs, where the gland was not involved, unless the disease was due to syphilis or lesion of the spine. This condition occurs more often in young men who have been subject to excessive masturbation or sexual indulgence, which brings about lesion of the prostate gland.

The onset of the trouble is usually manifested by a sensation of heaviness or weight about the lower limbs; which, as the disease progresses, becomes so marked as to interfere in climbing stairs. There is rarely any pain in these cases at first; and should it supervene at all, it is usually manifested by a few darting pains in some of the branches of the sciatic nerve, in the region of the popliteal space, or calf of the leg.

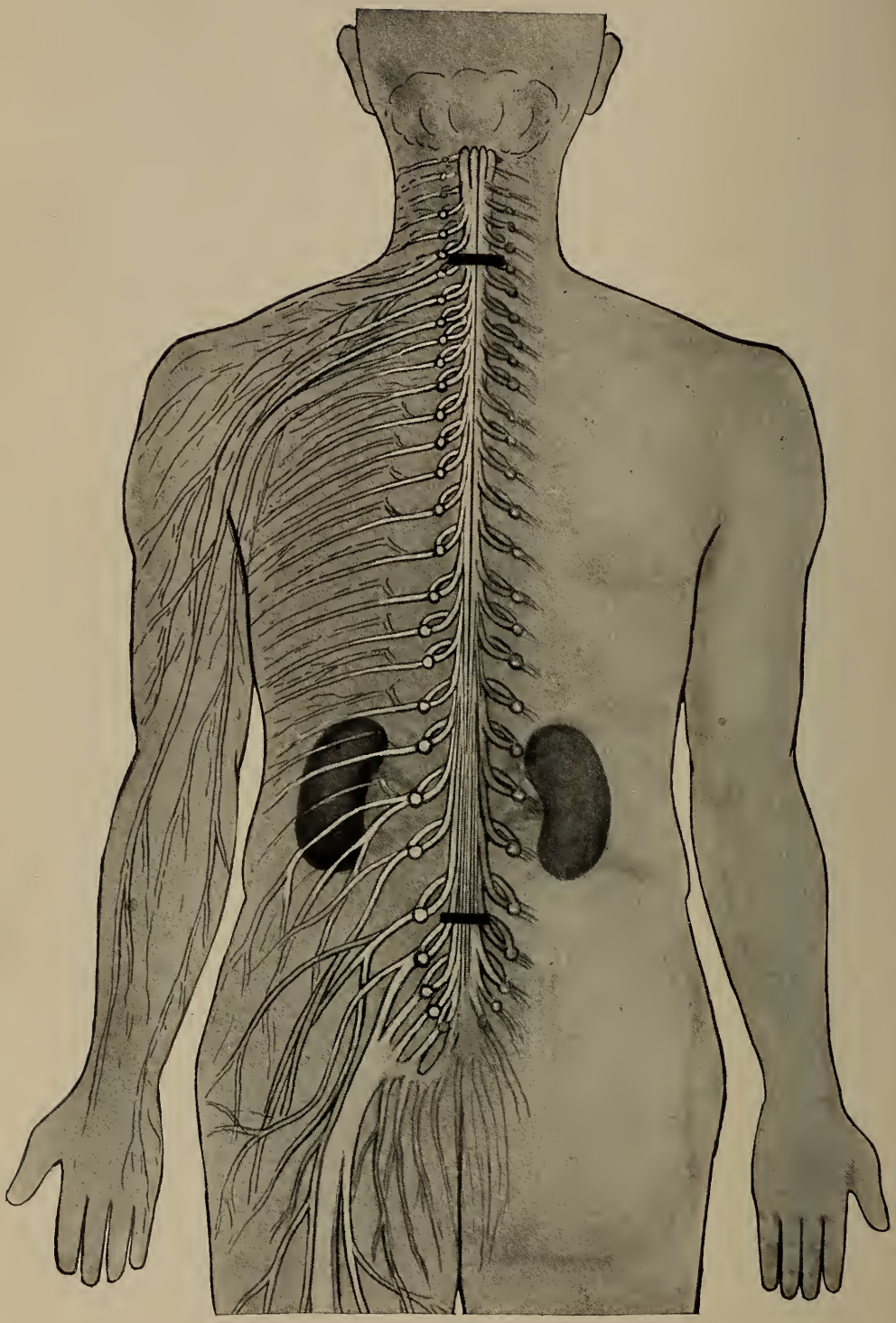

FIGURE XXIX.

The disease may be so slight as to be almost imperceptible. It is indicated by marked loss of power or impaired functions of the body from the hips down. It almost invariably results from lesion of some one of the pelvic organs, and more especially of the prostate gland. It is usually attended by marked pain in the lower spine, as shown by the lower mark in Figure XXIX. Special attention is called to this mark, as the seat of the pain is usually concomitant with a lesion of one of these organs; and is quite distinct from the location of the pain arising from the kidneys from which organ many people think this particular pain originates. Referring to the above figure it will be seen that the kidneys are located on the margin of the lower rib, much higher than where the pain is felt.

At times paraparesis slowly develops into paraplegia, with all its accompanying symptoms or pains in the calf of the leg, heel, hip, etc. At other times it develops very suddenly; total paralysis with loss of the entire limbs may occur within a single night. Again, one side only, generally the left, may be affected.

This condition is most frequently brought about by lesion of the prostate gland, which is transmitted to the prostatic ganglion, thence to the genito-spinal center, causing local congestion, effusion, or plastic exudation, hemorrhage, etc., at the latter point. This trouble readily yields to treatment in the large majority of instances if the cause is first relieved, and the reflex irritation removed—then absorption of this effusion or exudation immediately takes place and there is a gradual restoration of the parts to their normal condition. At other times, should relief not be obtained, then paralysis, or total loss of power from the hips down, ensues. Too much stress cannot be made upon the importance of this

trouble. It is quite common, and is generally considered incurable. In point of fact the large majority of such cases *are* curable. Special attention is directed to the matter preceding this illustrating the functions of the nervous system, together with the reflexes arising from the prostate as being the chief etiologic factors.

The progress of the malady is usually of an insidious nature, and especially is due to masturbation. If due to excessive sexual indulgence and accompanied with a bout of drinking, it is liable to occur suddenly. I have seen cases where sudden paraplegia resulted from bouts of drinking. In rare instances of this affection, the pains, as before described, have been the prominent premonitory symptoms. Others have described sensations as though something was creeping up their limbs.

Case 66. I recall the case of a man, twenty-eight years of age, who had been suffering eighteen months with paresis. There was no pain in the limbs, but the impaired function became more perceptible from week to week until there was total loss of power. During this time the young man had been treated by several physicians, and some of whom diagnosed the case as locomotor ataxia. Not one of them suspected the prostate as the cause of the trouble, or even examined it. When I first saw him he had no more use of his lower limbs than if they were made of rubber. I found him totally impotent, with a persistent prostatorrhea and occasionally nocturnal pollutions.

I directed my treatment entirely to the prostate, and improvement began at once. In six weeks' time he could stand upon his legs; and after six months he was back at work, and one could scarcely detect any defect in his gait.

Hemiparesis. This disease is common among older

men suffering from enlarged gland and hypertrophic inflammation of the prostate. The conditions brought about in the spinal column are very similar to those of paraparesis in young men. The main points of difference are that in young men the paraplegia and paraparesis are usually precipitated from acute conditions of the gland—while in old men hemiparesis results from chronic conditions of the prostate gland and their sequelae. The conditions causing the first, cause the second also, in the main. The cases I have seen have reported that the first symptom they noticed was the dragging of one foot in walking, or tipping the pavement with the toe. By observation it will be noticed that the end of the sole of the shoe is worn off, especially on the left side. The dragging is often noticed by a companion before the person himself.

Case 67. I recall one case who said the first time he had his attention called to any defect in his left foot was when his wife, walking upon the street with him, said: "Will, for goodness sake quit scraping your foot on the pavement." He had never noticed it before, and when his attention was called to the fact he went along for some distance without doing so again; but his mind being withdrawn from his walking, he was again reminded of it by his wife. When dressing the next morning he for the first time noticed that the sole of his left shoe was much worn out at the toe, while the other was not. From that time on he noticed a perceptible impairment of his left side. This was followed by loss of co-ordination in writing.

This case applied to me for treatment eighteen years ago. I did not know as much about the cause of these troubles then as now; so I treated his spine by electricity, massage and mechanical movements for several months,

which gave him temporary relief; but he grew gradually worse from month to month. He finally mentioned certain symptoms implicating the sexual organs that led to an examination of the prostate, which revealed the seat of the trouble. Noticeable improvement followed the treatment of the gland within two weeks. Three months thereafter he was able to resume his work and left the city. I did not see him again for nine months; he was then so far well that his defect was almost imperceptible.

Case 68. Merchant; aged fifty-six; married. Up to his fifty-third year he had been quite active. About that time he began to notice that he would scrape his right foot upon the pavement when walking. He could prevent this scraping, at first, when his attention was directed to it; but immediately on withdrawing his mind from the sluggish foot, the scraping of the pavement would recur. He next noticed an impairment of his right hand when attempting to tie a bundle. He was unable to grasp a string sufficiently tight to tie a knot. This condition grew worse by degrees, until he could not use his knife while eating. The left leg was equally impaired. Both hand and leg began to improve after the second week's treatment of a congested enlarged prostate. The gain was steady for two months; but there was still an impaired function.

CHAPTER X.

BRIEF OUTLINE OF THE ANATOMY, HISTOLOGY AND PATHOLOGIC CHANGES AS INFLUENCED BY PERVERTED CONDITIONS OF THE PROSTATE GLAND, AND SEQUELAE TO VARIOUS LESIONS DETAILED IN THIS WORK.

URETHRA. The urethra being the channel through which the urine, the semen, and prostatic secretions all pass, and moreover, being the passageway for all the irritating discharges resulting from the existence of pathological conditions in the deep seated organs, rarely escapes becoming involved either as a sequel to disease of these organs, or from being so exposed.

It is commonly regarded as the organ chiefly involved in lesion. It is the channel through which the deep seated organs are generally reached for purposes of treatment; and it often suffers maltreatment, both from the instrument used and (often) from the remedies applied. Either of these causes an irritative inflammation, granulated urethritis, or sometimes stricture. But granulated urethritis (often supervening upon maltreatment and causing thickening of the mucous lining and thereby encroaching upon the calibre) is often mistaken for stricture; and is not seldom so treated as to bring about the very condition the operator is endeavoring to avoid. The urethra is extremely sensitive from meatus to bladder, more particularly so in the prostatic portion at the exit of the prostatic and ejaculatory ducts. This point (the verumontanum) is so sensitive that spasm often ensues from instrumentation, and this is often mistaken for stricture.

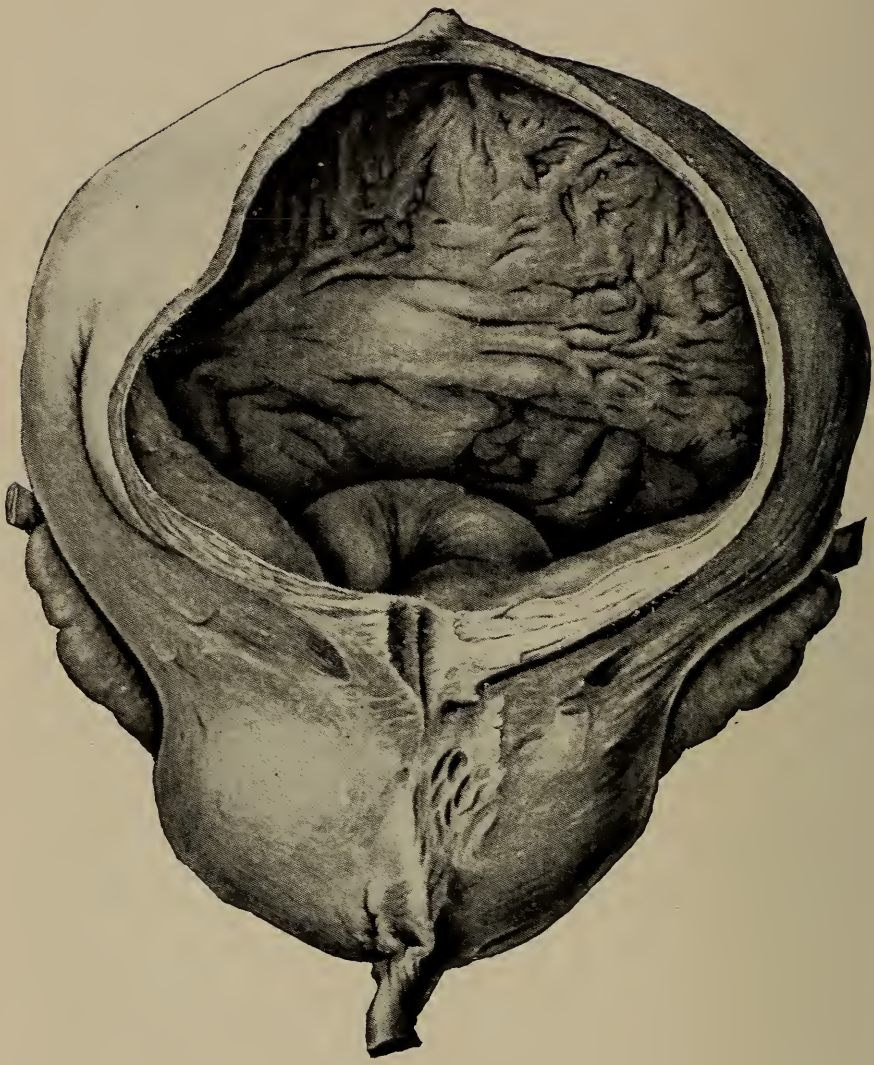

FIGURE XXX (From a specimen in the Mütter Museum of the College of Physicians of Philadelphia).

Seminal Vesicles. The seminal vesicles and prostate, owning to their contiguous relations and allied functions and to the fact that the latter is tunneled by the ducts of the former, are in close pathologic relation. As the swollen prostate must inevitably encroach by pressure upon the ejaculatory ducts, limiting thereby their elasticity and diminishing their caliber, increased exertion is required to expel the semen through the narrow channels; and, should these latter organs be inflamed or tender, pain would follow the ejection of semen during, or immediately after sexual intercourse. The pain is usually felt in the region of the perineum, lower part of the rectum, in the back or along the course of the vas deferens in one or both sides of the groin.

The pain resulting from the inflamed vesicles and ejaculatory ducts is of special significance in a diagnostic point of view, with reference to both the seminal vesicles and the prostate.

Bladder. Owing to continuity in the structure of the parts involved, chronic inflammation of the prostatic urethra, if not properly attended to, will sooner or later extend to the prostatic and ejaculatory ducts and then into the bladder. In cases of long standing the bladder becomes inflamed in direct proportion to the length of time the condition has existed and to the degree of inflammation. Figure XIII illustrates the beginning of the extension of the inflammation from the prostatic urethra and vesical neck. Figure XIV shows its extension into the bladder, also the enlargement and swelling of the gland, and its encroachment upon the rectum, causing an ulcer there. The bladder is peculiarly susceptible to become involved as a sequel to disease of the prostate.

The walls of the bladder may also become corrugated

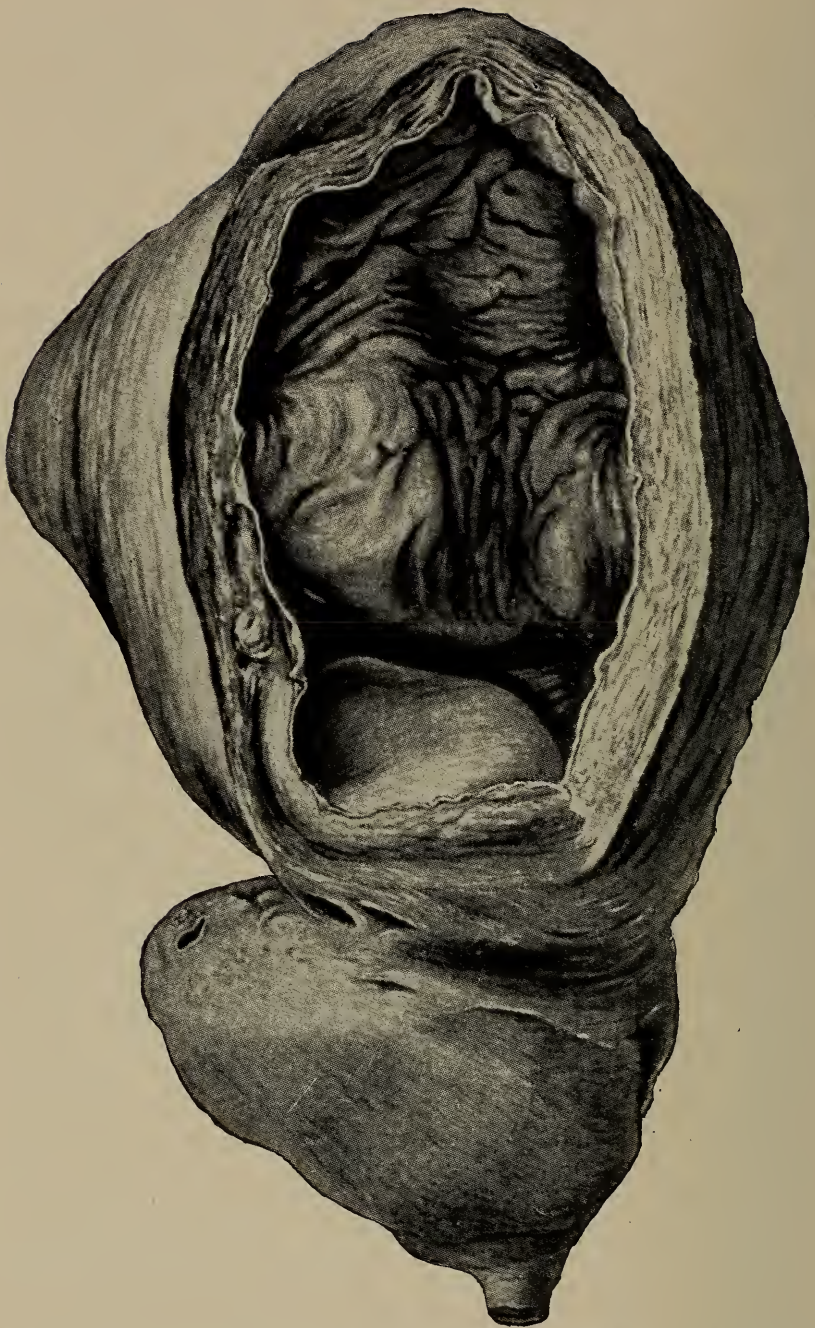

FIGURE XXXI (From a specimen in the Mütter Museum of the College of Physicians of Philadelphia).

and thickened; the size and capacity of the bladder are thus diminished, as is shown in Figures XXX, XXXI. These illustrations show true indurated hypertrophy and sacculated conditions of the bladder walls, induced by over-distension of the organ from an excessive quantity of urine and the efforts made to expel it. Certain muscles being constantly on the stretch become over-exerted and partially paralyzed, so as to lose the power of fulfilling their functions; and thus the sacculation arises. The thickened walls become largely reduced after the inflammatory condition of the prostate has been removed.

Figure XXXII illustrates an extremely common condition of the bladder walls, the prostate, ureters, and pelvis of the kidney. This condition follows all forms of diseases of the prostate—it is one of the most common and prominent sequelae of them. The inflammatory condition caused by disease of the prostate extends into the bladder, and by direct continuity from the bladder up the ureters to the expanded portion of the pelvis of the kidneys, as shown by their ragged, dilated and broken down appearance. The inflammation extending from the bladder to the pelvis of the kidney is often met with. If the case be dealt with in time, and the prostate relieved, the true parenchyma of the kidney rarely becomes involved; but if neglected the inflammation spreads from the pelvis to the parenchyma and produces Bright's disease. It is due to such condition of the pelvis of the kidney as are above illustrated, that we have the abundant whitish mass that periodically passes into the bladder and is evacuated, as described in a former chapter.

Kidney and Ureters. Idiopathic disease of the kidney is very rare, although the great majority of physicians regard disease of the kidney as one of the most frequent

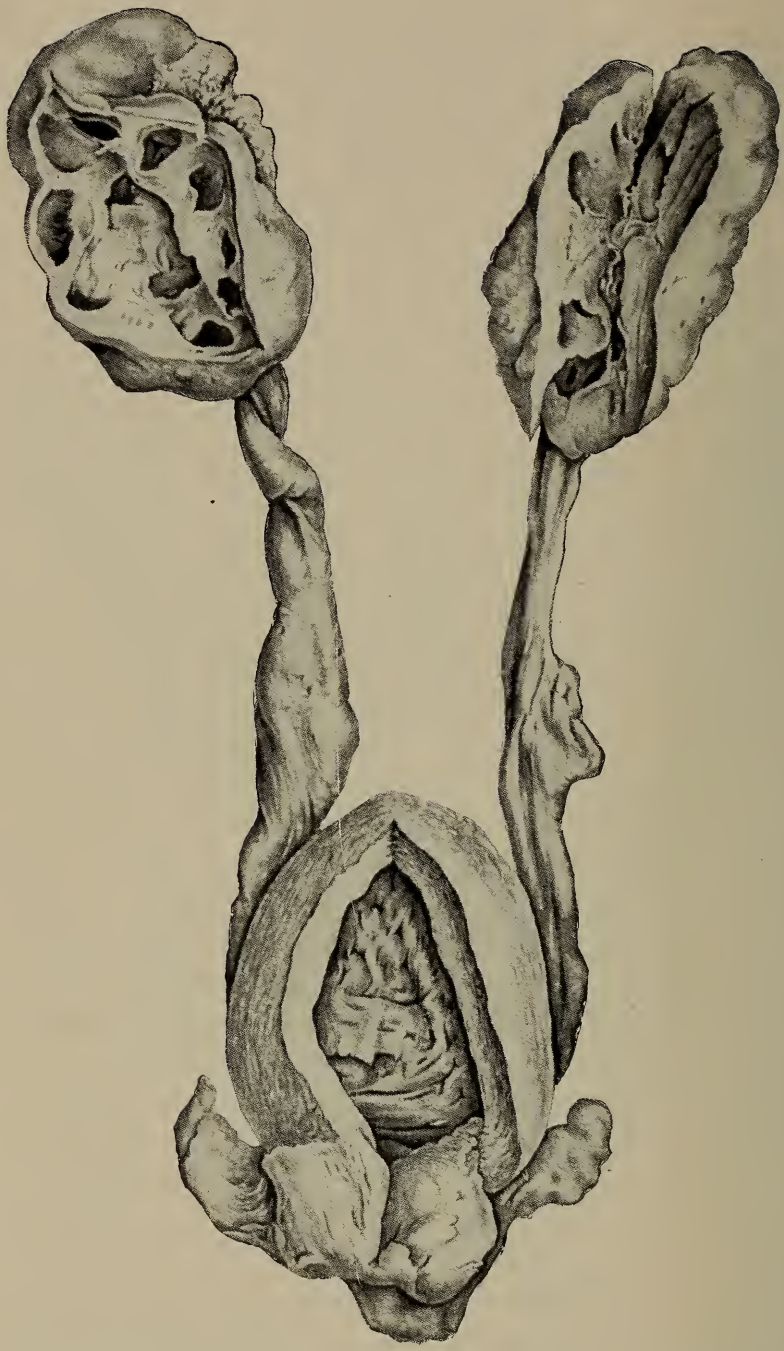

FIGURE XXXII (From a specimen in the Museum of the Pennsylvania Hospital).

causes of mortality. Pain in the lumbar region of the spine, at or about the fourth or fifth vertebra, especially if the urine be turbid, leads a physician to at once suspect disease of the kidney. The pain usually felt in the small of the back is located much below the kidney, at the point of the genito-spinal center. (Figure XXIX.) This latter is close to the origin of the sciatic nerve.

In passing, I may remark that sigmoiditis is often accompanied by a pain in the back of the neck—at the seventh cervical vertebra (Figure XXIX).

Figure XXXIII illustrates the interior of the kidney. "U," the ureter passing from the kidney to the bladder (as seen in Figure XII); "P," showing the pelvis, or an expanded portion of the upper ureter, and has practically nothing to do with the true parenchyma of the kidney itself (2, 3, 4, etc.), which are the true secreting parts of the kidney. Inflammation often extends from the bladder up to the ureter, "U," and involves "P," the pelvis, which fill with a whitish muco-purulent secretion. The inflammation extending from the inflamed bladder up the ureters involves the pelvis of the kidney as illustrated in Figure XXXII. This is a very common condition, and often results in interstitial nephritis or "Bright's disease." But the inflammation of the pelvis of the kidney and of the ureters can be relieved, and the lives of many men saved by preventing the extension of this inflammation to the parenchyma of the kidney.

During the many years I have treated these troubles, including many thousand cases, I have found only two of interstitial nephritis, or true parenchymatous inflammation of the kidney. There were many cases of pyelitis, where the pelvis of the kidney had been in-

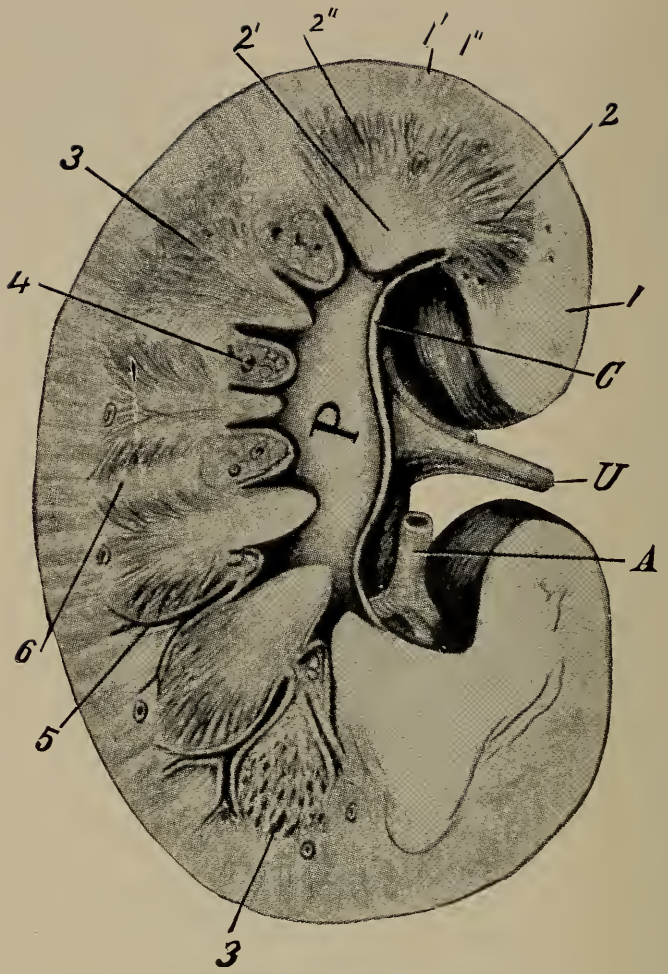

FIGURE XXXIII.

volved for many years without giving rise to the latter condition. "Bright's disease" is an elastic term. Formerly, whenever albumen was found in the urine, the case was considered to be of this nature. Subsequently it was ascertained that only when the kidney was diseased was albumen found in urine; the term was then made to include any disease of the kidney characterized by the presence of albumen. At the present day

the accepted terminology of "Bright's disease" is that it includes *any* disease of the kidney. The term interstitial nephritis or Bright's disease should be limited to parenchymatous inflammation of the kidney. This definition, if strictly adhered to, would exclude pyelitis (inflammation of the pelvis of the kidney); but the pelvis being part of the kidney, for the sake of convenience, we may include pyelitis under the general term "Bright's disease."

As pyelitis of grave form or of long standing leads to parenchymatous inflammation or interstitial nephritis, it must be considered a serious and dangerous disease. It is a potent causative factor of interstitial nephritis; and it is serious and dangerous within itself, causing the accumulation of matter that is extremely irritating to the genito-urinary passages. It also often initiates the formation of calculi within the pelvis of the kidney, and this is the precursor of stone in the bladder.

A grave mistake is often made when physicians endeavor to catheterize the ureters. The lumen of the ureter is ordinarily about the size of a common goose quill, and extends down behind the bladder, becoming somewhat constricted before it penetrates the bladder walls in an oblique direction beneath the mucous membrane, which latter serves somewhat as a valve.

These two peculiarities serve to prevent the regurgitation of the urine back into the ureters and also render catheterization of the ureters extremely difficult. Any attempt made to force an instrument through this small constructed orifice only serves to irritate the already inflamed ureter, thereby provoking additional trouble not only in the ureter itself, but it is apt to cause extension of the inflammation to the pelvis of the kidney as well as to the true kidney itself. This procedure, when

it is successfully accomplished, can only serve to carry infection to the pelvis of the kidney; and when it is not successful it inflames the ureters at their orifices or in the ureters themselves. Without this intervention, these organs might remain free from serious lesion for many years. The writer has seen pyelitis follow attempted catheterization of the ureter, and in several instances these cases ultimately resulted in interstitial nephritis.

Pyelitis, whether provoked by interference by catheterization of the ureter, or arising from any other cause, is a most common source of interstitial nephritis. Filling of the pelvis of the kidney with any irritative secretion, arising from any cause, more frequently provokes (by reason of continuity of structure) true parenchymal inflammation of the kidney than any other cause. This is a very important point from a pathologic point of view, as the disease in question is one of the most fatal with which the human race suffers.

Some twelve years ago I attended a case, of fifteen years' standing, suffering with stricture, prostatitis, cystitis and nephritis. The trouble extended to the pelvis of the left kidney, and subsequently to the entire organ. Suppuration ensued, which was followed by an abscess on the back, over the left kidney. The abscess had formed, and had been evacuated three times during the preceding two years, before I saw the patient. He had suffered constant pain in that kidney, and was in very bad health. The abscess re-formed, and was evacuated only once during the early stage of my treatment. He afterwards became strong and healthy, and lived eight years. I never saw him during his last illness. His death was reported as due to nephritis, though no autopsy was made.

Rectum. The rectum is the passage through which we

treat both the seminal vesicles and itself; and it, like the urethra, often becomes disturbed both by lesion and in function. Lesions are occasionally manifested in the rectum that doubtless arise from some pathogenic source in the prostatic vesicles or bladder. They can only be accurately detected by thorough exploration with a perfectly electric-lighted speculum, so arranged as to reflect the light directly upon the parts being examined, as some of these lesions are so minute as to escape detection unless the passage is very thoroughly lighted—so very dark and obscure are these cavities.

With the exception of the neck of the bladder and seminal vesicles, the rectum is the organ most frequently involved as a result of chronic prostatitis. The part most often affected is the front surface immediately opposite the prostate. Inflammation of this organ, owing to its close proximity to the rectum, readily extends to the latter. Figure XIV shows the position where it most often occurs. If the inflammation is of short duration and the gland is only slightly affected, the rectum at this point will show a condition of redness, with only a limited protrusion of the prostate into the rectum and without abrasion of the surface of the mucous membrane. In cases of long standing prostatitis, where there is considerable protrusion of the gland into the rectum, there is, as an almost invariable result, lesion of the mucous surface, and this being constantly irritated by the passage of fecal matter, in turn reacts upon the prostate, serving to increase the irritation and inflammation of the latter.

FIGURE XXXIV.

Engorgement of Portal Veins and Pampiniform Plexus.
(Semi-diagramatic.)

A. Appendix Vermiformis. B. Urinary Bladder. C. Colon—Ascending. C'. Colon —Descending. I. Small Intestine. L. Liver and Gall Bladder P. Pancreas. R. Rectum. S. Stomach. T. Testicle.

CHAPTER XI.

CONGESTED INFLAMED CONDITIONS ARISING AS SEQUELAE TO LESIONS OF THE PROSTATE, BLADDER, ETC., PREVIOUSLY DESCRIBED.

Figure XXXIV gives a semi-diagrammatic illustration of the congested and inflamed pelvic, abdominal, and thoracic viscera—the result of the lesions heretofore detailed.

The pampiniform plexus of veins, including the spermatic vein, and those of the bladder and the prostate, under abnormal conditions become highly congested. The spermatic vein, running from the appendix (A) to B and throughout the epididymus and testicles (T) also becomes extremely congested, and often feels like a bag of worms under one's fingers. The existence of these enlarged veins has been a source of great profit to quacks, by their attributing so many troubles from which young men suffer, to these alone. As a matter of fact they give rise to little or practically no trouble; and the operations which young men are frequently induced to undergo do infinitely more harm than good. It is extremely difficult to separate these engorged veins from the artery, the spermatic cord, or the nerve; and when one of these latter is tied (during an operation) with the vein it often causes atrophy or total degeneration of the testicles, impairing to a serious extent the sexual power, and often giving rise to a local irritation which is irreparable.

Removal of the lesion which causes the local congested

inflammations of the prostate, of the seminal vesicles or other pelvic organs, gives relief to the congestion of these organs; and also to the congested condition of the spermatic cord, to which latter so many diseases and complications are erroneously ascribed by quacks and others for their own gain.

The enlarged veins never return to their normal condition; but they can be so much reduced that no one could detect an abnormal condition; and no harm results from the enlargement primarily.

Similar conditions follow enlargement of both the portal and hepatic veins, as illustrated, and cause the same disturbed state of the entire ailmentary canal, including the colon, small intestines, pancreas, liver, and stomach. The lower border of the liver (L) is raised, in order to show the engorged, turgescent state of the gall bladder, and also that of the stomach, pancreas, and the kidneys (which are not shown in this diagram, yet equally involved), as are also the lungs and heart.

In addition to the involvement of these veins the sympathetic and cerebro-spinal plexuses of nerves are equally disturbed. In fact it is through the vaso-motor system of nerves that this congested clogging up principally occurs.

The disturbance of both the kidney and the liver, resulting primarily from these lesions, and secondarily from the engorgement of the veins and the disturbed condition of the nerves, causes a perverted action of these organs. This perverted condition results in the production of uric acid. Any one may note the folly of continuing the administration of alkalies to neutralize excessive uric acid and increasing thereby conditions not only for the development of calculi but for the production of the various alkaline constituents that saturate

the blood vessels, thereby limiting metabolism, both by way of anabolism and catabolism. This is effected chiefly by reason of the clogging of the interstices of the capillaries, thus preventing nutritious matter from entering the various tissues in order to be assimilated, and likewise preventing the passing out of the excrementitious matter to be eliminated from the body. These alkaline substances, resulting as before explained from the efforts of physicians to neutralize the uric acid, not only retard metabolism, but also cause the saturation of all the tissues of the body, including the skin; changing it from its normal soft elastic state to a dry, hard, and brittle one.

Worse still, the heart and arteries suffer equally or more from this cause, resulting in sudden death from arterio-sclerosis. From this source (alkalies and alkaline mineral waters) comes the formation of emboli.

Other lesions similar in character to these occur, and produce either disability or death by the formation of an embolus or thrombus from the debris denuded from the surface of an ulcer in e. g., the prostate, rectum or sigmoid flexure. Or it may even form from bacillus acting upon pus or other purulent matter and become drafted into the circulation. These conditions, together with the breakdown of the central nervous tissue resulting from reflexes (described at length in a previous page) are the chief precursors of sudden deaths in more instances than almost any other cause.

The coronary arteries of the heart, the basilar arteries of the brain, and the renal arteries of the kidneys are specially susceptible to emboli owing to their limited anastomosis, and their termination into minute arterioles and venules. Pus, bacteria, and particles of debris, enter the circulation through abrasions in the surface of the

prostate, vesicles, etc., and are carried along the arteries to one of these organs; and not being able to pass through the arterioles or venules to enter the return veins, they become obstructed and form a clot, or break down the thin delicate walls of these vessels. They also form abscesses, softening of the brain, degeneration, interstitial nephritis, and by occluding the orifices of the heart sometimes cause early or sudden death.

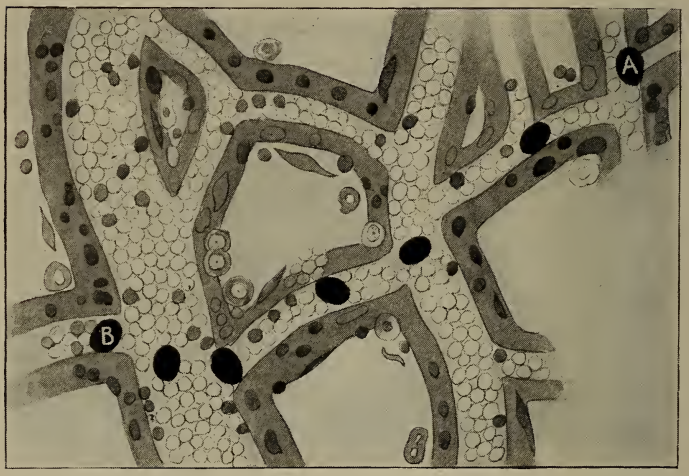

FIGURE XXXV.

Figure XXXV illustrates the passage of such an embolus ("A" and "B") from left to right, showing its progress along the blood vessels, until it reaches one too small for it to pass, and it becomes obstructed. This often takes place at the base of the brain, and in the fourth ventricle, causing either hemorrhage or effusion and sudden death, or gradual softening of the brain. The same pathological condition is equally liable to occur in the heart or kidneys.

CHAPTER XII

MISCELLANEOUS CASES.

Case 69. J. K. L.; male; 9 years of age; pale, delicate, headaches, wore glasses, had been circumcised in his infancy; no hereditary idiosyncrasy, father, mother and an older brother and younger sister in perfect health. He began at the age of 7 with slight headaches; he was then supplied with glasses, some temporary relief—necessitated to discontinue school. He was very costive, and had been from youth. There was a drawing, creeping sensation across the lower abdomen, itching about the anus, often requesting his mother to rub his perineum. He had been given considerable "worm medicines" from almost every physician that had been consulted previously, without results. At the age of 8 he began having chorea, then petit-mal. At first these attacks recurred regularly each month, then weekly and finally two or three daily. The child had been dosed with bromides until he was weak, prostrated, dull and stupid, with appearance so white as if there was not a drop of red blood in his body. After much difficulty, one slight lesion was located in the rectum. Relief of this was attended with some benefit, but not as much as I had expected. Treatment for six months continued with but little relief, except that the epileptic attacks had grown less frequent. The bromides, of course, had been discontinued. I had begun to think that it was the cessation of the bromides that had kept up the epileptic attacks, but finally a more thorough physical ex-

amination revealed a pyro-sac as the seat of the real trouble. Removal of this resulted in complete restoration of health. He has remained healthy ever since, and is now a strong, hearty boy of seventeen.

Epilepsy. Case 70. Age 22, perfectly healthy to his seventeenth year. He then began having headaches and other nervous symptoms, until mild attacks of epilepsy supervened. His family physician administered to him first bromides and then opiates; his spells continued to grow in frequency and severity. He was advised to see the writer when he was 22 years of age; he was then having sometimes two or three attacks daily. After each attack his doctor (?) would give him opiates to relieve the pain in his head, until he became addicted to them and could not do without them. After the cause of his trouble had been located and removed he continued to have the attacks once a month, and later every two months, when I incidentally learned that he was taking morphia. I insisted on the young man's parents dismissing his physician, which they did, giving as a reason that the boy had been supplied with drugs. This physician had given the patient a prescription which included morphia and which had been refilled several times before I became aware of it. The spells by this time had entirely subsided, and he had not had one in four months. When he was sent home, I notified his parents of the addiction of the young man, and insisted that they should keep him away from opiates; but subsequently learned that he had returned to them and that the attacks of epilepsy had recurred.

Case 71. Man of thirty-three, single, lived an abstemious and moral life; perfectly well until his thirty-first year. Then he began noticing tingling in his fingers, loss of memory, insomnia, acute indigestion, roaring

sounds in left ear, pain in calf of left leg and back of neck; gases in stomach, and bowels constipated. He was operated upon for appendicitis, then hemorrhoids. Grew worse. He was advised to undergo an operation on his liver for sand or gravel, as he had a continuation of the same pain in right side, after the operation for appendicitis. He consulted an oculist and aurist, who treated him for six months. No relief. He gradually grew worse and was greatly emaciated, when he consulted the writer, upon the advice of his family physician. Examination revealed an exceedingly tender and sensitive urethra, prostate and vesicles. Treatment for a short while relieved him somewhat, but at the expiration of six weeks he became discouraged and returned home. During all this time he had a continual, hacking, irritative cough. One of his physicians diagnosed his trouble as tuberculosis; and advised him to go to Golden, Col. After three months he left there in a worse condition than he was in when he went. From there he went to Texas and Mexico, remaining there one year, and then returned home, expecting to die at any time. His family physician advised him to return to me as a last resort, stating that if I did not cure him he would never get well. Examination disclosed the prostatic urethra, bladder, and seminal vesicles exceedingly tender and hyperesthetic, but with no abrasion of the surface.

I was convinced by this time that he was practicing masturbation, although he denied it strenuously, and claimed he was impotent. Treatment to allay local hyperesthesia improved his condition in every respect—even his appetite returning and his digestion improving. Finally he stated that his sexual desires were returning. He gained slowly from day to day; after six months

he was restored to normal health, and is now engaged in his ordinary occupation. He has gained 19 pounds in weight, and occasionally writes to me to tell me that he is still improving in weight and strength.

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